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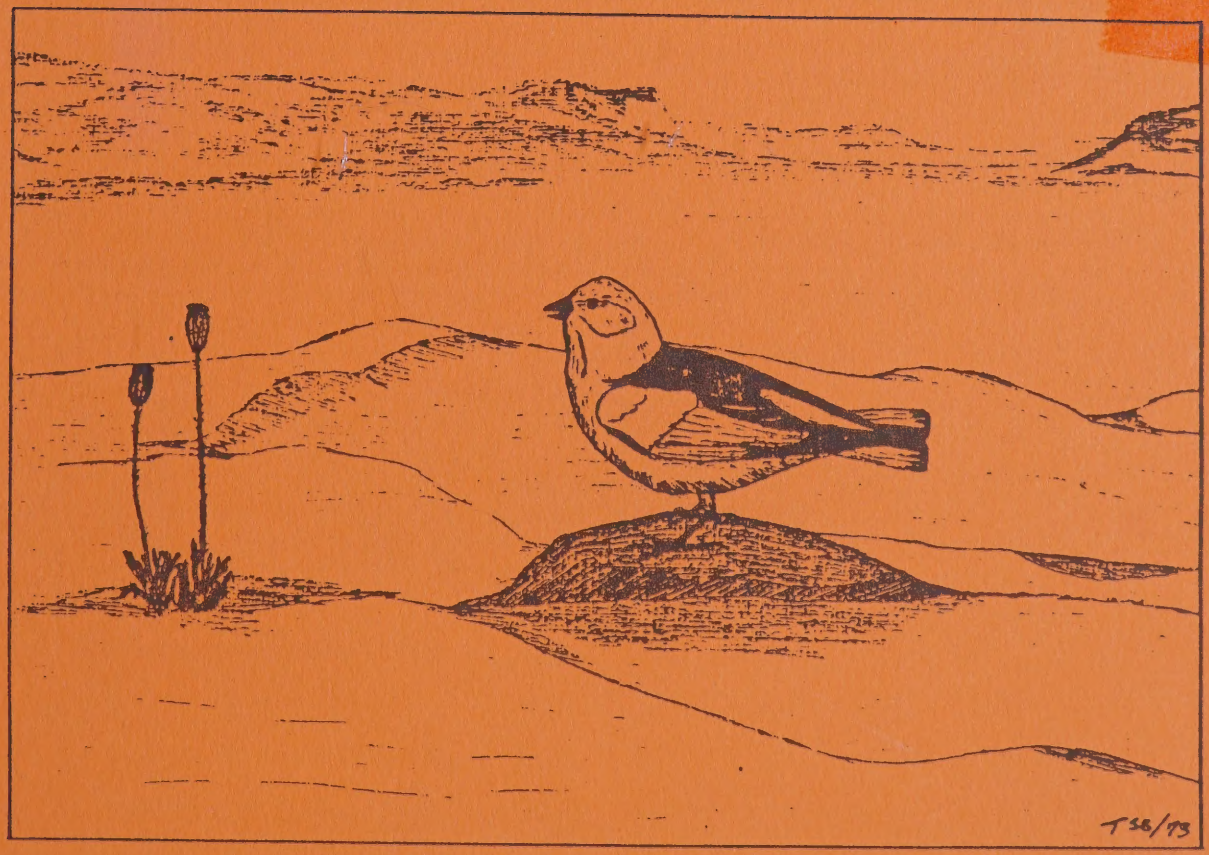
VOLUME 12, SUPPLEMENT 1, MAY 1982



ALBERTA NATURALIST

VOLUME 12 SUPPLEMENT 1 MAY 1982

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ALBERTA CHRISTMAS BIRD COUNTS - 1981

by Virginia Young
R.R. #1, Busby, Alberta TOG OHO

A record number of species - ninety-six - were observed by 337 participants on eighteen Alberta Christmas Bird Counts this year. The mild, late fall resulted in a number of "firsts" on local counts as well as four Provincial "firsts". In addition to interesting sightings, we recorded the second-highest number of individual birds ever.

Calgary retained the Turner/Halladay Trophy for the highest number of species. In fact, Calgary set a new record of 56 species and, at the same time, added four new species to their count list - Northern Shoveler, Glaucous Gull, House Finch and White-throated Sparrow. Wabamun Lake and Banff/Canmore each had 45 species. Wabamun Lake added four new species to their list - Eared Grebe, Pine Siskin, Red-necked Grebe and White-winged Scoter. To my knowledge, the latter two species are new for the Province as well. Banff/Canmore added three new species to their list - Golden Eagle, Black-backed 3-Toed Woodpecker and American Robin. Other Provincial "firsts" were added by Edmonton (a Greater Scaup!) and Dunstable (a Mourning Dove!!).

Bow Summit reported the fewest species and individuals. Mike McIvor, compiler, commented "It is entirely possible that we have set a new standard! Never have so many worked so hard for so few!". Twelve observers travelled 138 miles to locate twenty birds of seven species. That's one bird every 6.9 miles! However, Bow Summit came up with the only White-tailed Ptarmigan this year.

Wabamun Lake had the highest number of species reported on one count only with ten. Calgary and Banff/Canmore each contributed five species to the total species count. Edson and Edmonton had two each, and Stettler, Bow Summit and Dunstable each contributed one species. It is interesting to note the high per cent of the total number of species which occurred on only one count (see Table 1). In fact, species which occur on only one count traditionally outnumber species which are reported from half or more of all counts.

Table 1. Proportional distribution of species on Alberta Christmas Bird Counts, 1977-1981

	1977	1978	1979	1980	1981
# Counts	13	13	15	19	18
# Species	91	87	91	88	96
# Species rpt. 1 count only	29	29	29	21	27
% Species on 1 count only	31.9%	33.3%	31.9%	23.9%	28.2%
# Species 50% or more counts	20	20	16	19	20
% Species 50% or more counts	22.0%	23.0%	17.6%	21.6%	20.8%

Despite the high number of species and individual birds reported on this year's counts, the ten most abundant species account for 91 per cent of the total number of individuals. Table 2 shows this proportion is the rule rather than the exception.

Table 2. Ten most numerous species, Alberta Christmas Bird Counts, 1977-1981

	% of total individual birds				
	1977	1978	1979	1980	1981
Bohemian Waxwing	31.4%	46.2%	21.2%	32.1%	35.4%
Mallard	11.8%	18.4%	27.6%	8.9%	16.8%
Snow Bunting	4.9%	2.5%	1.8%	2.1%	7.9%
Common Redpoll	8.4%	2.6%		5.9%	6.0%
House Sparrow	8.7%	5.9%	10.7%	10.9%	5.6%
Rock Dove	5.8%	5.0%	7.9%	5.0%	5.3%
Black-billed Magpie	5.4%	4.2%	6.3%	7.1%	4.6%
Black-capped Chickadee	4.3%	2.8%	5.8%	7.6%	3.7%
Common Goldeneye	3.0%		3.4%	2.3%	3.1%
Evening Grosbeak			1.2%	4.6%	2.6%
Pine Grosbeak	2.9%				
Gray Partridge		1.5%			
Common Raven		1.6%	.8%		
Total Per Cent Most Numerous 10 Species	86.6%	90.7%	86.7%	86.5%	91.0%

Six counts included notes on mammals and mammal signs sighted during the course of their counts, as follows:

Dunstable - 1 coyote with mange, numerous tracks; 6 white-tailed deer + numerous tracks; porcupine track; muskrat, young of the year travelling overland; weasel tracks; shrew tracks; a varying hare + numerous tracks; 6 red squirrels
Erskine - 1 coyote, 9 white-tailed deer; porcupine tracks; 2 beaver
Lethbridge - 58 mule deer; 58 white-tailed deer; 27 antelope; 1 porcupine track; 3 cottontail rabbits; 5 varying hares
Stettler - 1 mule deer; 1 long-tailed prairie weasel (carrying a vole); 1 red squirrel; 2 flying squirrels
Red Deer - 2 coyotes; 2 mule deer; 2 muskrats; 1 weasel; 2 voles; 8 varying hares
Wembley - 1 coyote; 4 wolves (heard); 6 mule deer; 1 white-tailed deer; 2 moose; 1 mink; 4 varying hares; 3 red squirrels.

Another record, of sorts, was set this year. As of 1981 over half of Alberta counts are "official" in that they comply with the rules set by the American Audubon

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Society and their results will be published in American Birds. These counts are: Banff/Canmore, Bow Summit, Calgary, Edmonton, Horseshoe Canyon, Kananaskis Valley, Snakeshead, Wabamun Lake, Fort McMurray and Wildlife Reserve of Western Canada.

If you decide to start a new count, or to begin submitting your established count to American Birds, write before 1 November 1982 to: Christmas Bird Count, American Birds, 950 Third Avenue, New York, N.Y., USA 10022. Include with your letter: (1) a map of your (proposed) count circle (counts must be done within a 15-mile diameter circle); (2) names of the nearest adjacent counts (if known); and (3) an indication of the size and experience of your count group. You should receive a set of instructions and an official report form by 30 November. Counts from more remote areas are especially desired.

Specifics of this year's counts are on Table 3. Details of each count, as forwarded to me, are listed below. If additional information is required, check with the individual count compilers.

BANFF/CANMORE

51°10'N, 115°28'W, center on the Bow River 4.5 miles east of Banff in Banff National Park. Elevation 4400 to 5600 ft. Habitat coverage as described in 1976.

December 19, 1981; 8am to 5pm. Am: mostly cloudy, intermittent light snow; Pm: partly cloudy. Temp. +4° to -11°C. Wind W, 11 kph. Snow cover 5 to 20 cm. Wild food crop fair.

Forty observers, 36 in 16 parties, 4 at feeders. Total party-hours, 97.5 (90.5 on foot, 7 by car) plus 8 at feeders. Total party-miles, 174 (101 on foot, 73 by car). 45 species, about 1624 individuals.

Seen during count period but not on count day: Bufflehead, Snow Bunting.

Observers: Janet Amy, Dodie Atkinson, Gail Baker, Elisabeth Beaubien, Don Bourdon, Doug Collister, Corlaine Davidson, Sue Davies, Heather Dempsey, Halle Flygare, Rob Gardner, Fran Grainger, Jean Greig, Margery Hadley, Helen Herrle, Geoff Holroyd (compiler, Box 1343, Banff, Alta. TOL 0C0), Tom Hoskins, Stuart Johnston, Marlene Langevin, Peg and Tom Lothian, Pauline Martin, Keith McDougall, Diane and Mike McIvor, Harold and Julie Mortimer, Ken Moure, Julie Murphy, Bunty Nelson, Brain Patton, Jamie Podlubney, Bart Robinson, Ralph Smith, Cordy Tymstra, Kevin Van Tighem, Dan Verral, Jon Whyte, Gerry Wilkie. (Bow Valley Naturalists)

BOW SUMMIT

51°39'N, 116°25'W, center south end of Bow Lake in Banff National Park. Elevation 5700-7800'. Habitat coverage: coniferous woodland 63%; lakes and streams 28%; alpine meadow 9%.

January 2, 1982. 8:45am to 3:30pm. Am: partly cloudy, intermittent light snow. Pm: partly cloudy, intermittent light snow. Temperature -18° to 6°F. Wind: S. 0-15 mph. Snow cover: 24-36". Fresh water mostly frozen. Wild food crop fair.

Twelve observers, 12 in 4 parties. Total party-hours: 30.5 miles (23.5 on foot, 7 by car). Total party-miles: 138 miles (43 on foot, 95 by car). (Add: Chickadee sp. 2.) 7 species, 20 individuals.

Observers: Elisabeth Beaubien, Don Bourdon, Sue Davies, Halle Flygare, Linda Flygare, Margie Hadley, Geoff Holroyd, Marlene Langevin, Ron Langevin, Diane McIvor, Mike McIvor (compiler, Box 114, Banff, Alta. TOL 0C0), Louise Patton. (Bow Valley Naturalists)

TABLE 3. Birds observed on the 1981 Alberta Christmas Bird Counts.

	Banff/ Canmore	Bow Summit	Calgary	Dunstable	Edmonton	Edson	Erskine	Fort McMurray	Horseshoe Canyon	Jasper	Kananaskis Valley	Lethbridge	Red Deer	Snakeshead	Stettler	Wabamun Lake	Wembley	Wildlife Res. West. Canada	TOTALS
Red-necked Grebe																1			1
Horned Grebe																1			1
Eared Grebe																1			1
Western Grebe																4			4
Pied-billed Grebe			1													1			2
Canada Goose			181									490+							671+
Mallard	131		6220	3	107							2000				1324			9785
Gadwall			2													44			46
Pintail			3													1			4
Am. Grn.-w. Teal	3		9																12
Amer. Wigeon			4													1			5
Northern Shoveler			1																1
Redhead					2											6			8
Ring-necked Duck																5			5
Canvasback																1			1
Greater Scaup					1														1
Lesser Scaup			1													4			5

Table 3. (continued)

	Banff/ Canmore	Bow Summit	Calgary	Dunstable	Edmonton	Edson	Erskine	Fort McMurray	Horseshoe Canyon	Jasper	Kananaskis Valley	Lethbridge	Red Deer	Snakeshead	Stettler	Wabamun Lake	Wembley	Wildlife Res. West. Canada	TOTALS
Common Goldeneye	62		1553		7											164			1786
Barrow's Goldeneye	3		2													1			6
Bufflehead			2													3			5
White-winged Scoter																2			2
Ruddy Duck																1			1
Hooded Merganser			2																2
Common Merganser	5		44									2							51
Red-breasted Merganser																1			1
Goshawk	2		4	1	2	2	1						1			5	1	3	22
Sharp-shinned Hawk					1														1
Red-tailed Hawk												1		1					2
Rough-legged Hawk			15		1		1		1	1		9		4				2	34
Golden Eagle	1		1									7					2		11
Bald Eagle			3	1		1										3			8
Marsh Hawk			10																10
Gyrfalcon																1			1
Prairie Falcon			4						1			1							6

Table 3. (continued)

	Banff/ Canmore	Bow Summit	Calgary	Dunstable	Edmonton	Edson	Erskine	Fort McMurray	Horseshoe Canyon	Jasper	Kananaskis Valley	Lethbridge	Red Deer	Snakeshead	Stettler	Wabamun Lake	Wembley	Wildl. Res. West. Canada	TOTALS
Merlin			7		7							1		1					16
American Kestrel					2														2
Spruce Grouse	1													1					2
Ruffed Grouse	1		1	3	5		4				2		3	3		2	3	6	33
Wht.-tailed Ptarmigan		1																	1
Sharp-tailed Grouse			9				1					20					50		80
Ring-necked Pheasant			5		15		3		1			8							32
Gray Partridge			40		199		1					47		7			22		316
American Coot																8			8
Killdeer	5		7																12
Common Snipe	1		1																2
Glaucous Gull			2																2
Rock Dove			965	20+	929		46		68			231	297	5	280	127	91	11	3070+
Mourning Dove				1															1
Great Horned Owl	1		8	1	4	2	4		1			9	4		2	2	2	1	41
Snowy Owl			6					1				16					2	1	26
Hawk Owl				1		1													2

Table 3. (continued)

	Banff/ Canmore	Bow Summit	Calgary	Dunstable	Edmonton	Edson	Erskine	Fort McMurray	Horseshoe Canyon	Jasper	Kananaskis Valley	Lethbridge	Red Deer	Snakeshead	Stettler	Wabamun Lake	Wembley	Wildl. Res. West. Canada	TOTALS
Pygmy Owl	1																		1
Barred Owl						1													1
Great Gray Owl						1								3					4
Short-eared Owl			2		1				6					3					12
Saw-whet Owl						1													1
Belted Kingfisher	3																		3
Common Flicker			3									15							18
Pileated Woodpecker	2				2					1			3	1	1	3		3	16
Hairy Woodpecker	8		5	3	12	8	2					2	10	12	4	15	2	8	91
Downy Woodpecker	6		18	1	28	10	5			1		11	18	14	11	21	2	9	155
Blk.-b. 3-toed Woodp.	1																		1
Nor. 3-toed Woodpecker	5																	4	9
Horned Lark												17					1		18
Gray Jay	30	6		1		10		4		4	6			8		8	3	30	110
Blue Jay				7	169	25	2	7				8	25	16	4	46	4	9	322
Blk.-billed Magpie	155		471	15	875	3	41		104	9	2	369	132	110	83	90	46	161	2666
Common Raven	225	4	17			37	1	390		52	1	1		28			19	48	823

Table 3. (continued)

	Banff/ Canmore	Bow Summit	Calgary	Dunstable	Edmonton	Edson	Erskine	Fort McMurray	Horseshoe Canyon	Jasper	Kananaskis Valley	Lethbridge	Red Deer	Snakeshead	Stettler	Wabamun Lake	Wembley	Wildl. Res. West. Canada	TOTALS
Common Crow	17		52			5						1							75
Clark's Nutcracker	34																		34
Blk.-capped Chickadee	110	2	219	46	638	77	43	7	7	4	22	64	218	83	47	341	23	193	2144
Mountain Chickadee	70									4	15							1	90
Boreal Chickadee	62		29	6	10	24					2		17	46		27		72	295
Wht.-br. Nuthatch	4		13	2	12	4						8	5	6		3		6	63
Red-br. Nuthatch	1		4		10	1					3		1					3	23
Brown Creeper	3		9	1	1								3	3		1		2	23
American Dipper	34		1							3		3		3				4	48
Winter Wren	1																		1
American Robin	30		7										1	1					39
Townsend's Solitaire	3	1																	4
Golden-cr. Kinglet	4		18											2				2	26
Bohemian Waxwing	162		1720		15,330		5	102	93	18	35	326	2460	3	80		230	2	20,566
Cedar Waxwing					16							15							31
Northern Shrike	1		3	1	1		1					1	2	1	1	3	1	4	20
Common Starling	4		266		149			11				82	1				27	3	543

Table 3. (continued)

	Banff/ Canmore	Bow Summit	Calgary	Dunstable	Edmonton	Edson	Erskine	Fort McMurray	Horseshoe Canyon	Jasper	Kananaskis Valley	Lethbridge	Red Deer	Snakeshead	Stettler	Wabamun Lake	Wembley	Wildl. Res. West. Canada	TOTALS
House Sparrow	210		569	6	1055	24	24	13	99			631	125	125	177	71		140	3269
Western Meadowlark															1				1
House Finch			1																1
Evening Grosbeak	71		178	25	652	59					3	48	269	61	3	115	27	1	1512
Pine Grosbeak	40	2	21	2	102	31		5					9	49		99	45	60	465
Hoary Redpoll					2	86			1							34	7	6	136
Common Redpoll	79		243	1	481	71		66	461		2	150	532	260		206	400+	537	3489+
Pine Siskin					28								15			2		3	48
Red Crossbill		2																3	5
White-winged Crossbill	8															1			9
Dark-eyed Junco	6		8		10				53			1	1						79
Tree Sparrow									19			6	1					8	34
Wht.-throated Sparrow			1																1
Snow Bunting					73	13	252	12	351			82	75	848	23	69	752+	2091	4614+
TOTAL # SPECIES	45	7	56	22	37	24	18	11	15	10	11	36	26	30	15	45	24	36	96
TOTAL # INDIV. BIRDS	1,624	18	12,991	148*	20,939	497	592	618	1,266+	97	93	4,683	4,228	1,708	717	2,860	1737+	3,459	58,255
TOTAL # OBSERVERS	40	12	44	2	48	10	12	2	5	9	1	41	23	15	21	14	5	33	337

CALGARY

December 20, 1981. 56 species, 12991 individuals [13,158], 44 observers. Party-hours 98 (64 on foot, 34 by car); party-miles 408 (71 on foot, 337 by car). 44 observers in 14 parties.

Temp. 36° to 47°F. Wind W. 15 to 47 km/hr (9-28 mph). Sky partly cloudy. Snow cover 0-2". The warm and open autumn with few storms contributed to a number of species lingering in the Calgary area.

Observers: Stu Alexander, Elizabeth and Des Allen, George Blundun, Florence Bolton, Denis Braman, Barry Burrows, Rudi Butot, Doug Collister, Mary Coughlin, Les Eliuk, Art Fisher, Pat Frame, Willis Hall, Ian Halladay (compiler, 2103 Crocus Rd. NW, Calgary, Alta. T2L 0Z7), Dorothy Hazlett, Cedric Hitchon, Stuart Johnston, Brian Keating, Paul Keogh, Garry, Nannette and Susan McKay, David Matthews, Wally Platts, Jamey Podlubny, James Posey, John Price, Ed Quist, Kim Riekki, Michael Rogers, Barbara, Ian, Mark and Peter Sherrington, Lorna and Andrew Slater, Jack Steeves, Don and Philip Stiles, Robert Storms, Lena Suneby, John Thompson, Roy Woods.

DUNSTABLE

Center, Dunstable School, NW23Tp57R2 W5, including east side Lac la Nonne, north side Nakamun Lake, west side George Lake, Cranes Lake and Newton Lake. Habitat coverage: coniferous woods 10%; deciduous woodland 40%; farmland 40%; lakes and streams 10%.

December 20, 1981. 34°-38°F. Strong west winds throughout day, 3-4" snow cover. Wild food crop good. 2 observers in 1 party. Party-hours 6 (1 on foot, 5 by car); party-miles 261 km (12 on foot, 249 by car). 22 species, 148 individuals. Seen during count period but not on count day: Great Gray Owl (2). Observers: Virginia Young (compiler, R.R. #1, Busby, Alta. T0G 0H0), Harry Young.

EDMONTON

54°31'N 113°31'W, center SW corner University of Alberta Farm, area and habitat coverage as described in 1974. Elevation 2050 to 2250 feet.

December 20, 1981. 8:00am to 4:45 pm. Temperature 36°-40°F. Wind W. 10 mph. Snow cover 1-3". Water partly open. Wild food crop good. Forty-eight observers in 20 parties. Total party-hours, 120.5 (84 on foot, 36.5 by car); party-miles 531.5 (108.5 on foot, 423 by car). 37 species, 20,939 individuals. Seen during count period but not on count day: Common Flicker, American Robin.

Observers: Ed Andrusiak, Kay Ball, Brian Beiderman, John Bell, Rob Burgener, Graham Chambers, Lewis Clark, Brian Crawford, Ray Cromie, Jeff and Susan Cumming, Dave Cuthiell, Peter Demulder, Loney Dickson, Dave Dodge, Rainer Ebel, Joyce Gould, Graham and Pat Greenlee, Miles Hennie, Alan Hingston, Louise Horstman, Harry and Betty Horton, Mal Landry, Jim Lange, Sylvia L'Hirondelle, Gerry Lunn, Dave McCorquodale, Ron and Janet McElhaney, Jack Park, Richard Quinlan, Malcolm Ramsey, Ed Ridgeway, Craig and Virginia Scharf, Mike Schroeder, Alf and Margo Scott, Kathy Simmons, Kathy Smyth, Liz Stinson, Gary Tetzlaff, Bob Thompson, Terry Thormin (compiler, #306, 10630 122 St., Edmonton, Alta.), Bob Turner, Fred Wiley.

EDSON

December 28, 1981. Dawn to dusk, within 15 mile diameter circle, center at 4th and Main Streets in Edson. 24 species, 497 individuals, 10 observers: Heather Marshall, Ann Rugulies, Gloria Musson, Kirk Flower, Alain Magnan, Clayton Truman, Dean Mushtuk, Todd Mahon, Darren Peterson, Paul Marshall (compiler, Box 610, Edson, Alta.). (The Hampson-Marshall Bird Club.)

ERSKINE

December 27, 1981. Erskine, Ewing Lake, Red Deer River area; 7-1/2 mile radius center at Charles Forsyth farm, NW32-37-21-W4, 6 miles south and 4 miles west of Erskine, Alberta.

Habitat: native parkland and roadsides 55%; farmland 40%; farmyards and townsite 5%. Cloudy with light snow, light breeze NE to W. Temperature -18° to -13°C, snow cover 2". Total party-hours 18; party-miles 75 (68 by car, 7 on foot). 18 species, 592 individuals, 12 observers. Seen during count period but not on count day: 12 Horned Larks.

Observers: Rosemary Dowie, Jamie and Susan Foster, Gladys and Wilf Hewlett, Martha and Ron Kruger, Bea and Marvin Lohr, Lloyd Lohr (compiler, Box 1414, Stettler, Alta.), George and Grace Neill.

FORT MCMURRAY

15-mile diameter circle centered on the bridges which cross the Athabasca River. Elevation 767 to 1211.

December 20, 1981. 0900 to 1630. Weather: AM overcast, light intermittent snow; PM overcast. Temperature: -8° to -9°C. Winds W. to NW, 8 to 12 kph. Snow cover 10 to 20 cm. Two observers in one party, party hours 7-1/2 (7 by vehicle, 1/2 by foot); party-kilometers 101 km.

Observers: John Gulley (compiler, P.O. Box 8201, Fort McMurray, Alberta T9H 4J1), Sherry Gulley.

HORSESHOE CANYON

51°23'N 112°53'W, center Highway 9 at the point closest to Horseshoe Canyon, include west portion of Drumheller, Kneehills Cr., Rosebud R., Red Deer R., Midlandvale, Nacime, Dunphy, Eatine, Hasketh and Beynon. Elevation 2252-3050'. Habitat coverage: open farmland 45%; creek and riverbottom 25%; wooded upland and edge 20%; townsite 5%; farmyards 5%.

January 2, 1982. 8:30 am to 5 pm. Clear. Temperature -27° to -20°F. Wind SE, 0-15 mph. Snow cover 0.5 to 3". Water frozen. Wild food crop fair. Five observers in 4 parties; party-hours 26.5 (7.5 on foot, 19 by car); party-miles 387 (16.5 on foot, 370.5 by car). 15 species, 1266± individuals.

Observers: Brad Edwardh, Peter MacFarlane, Kim Riekki, Robert Storms (compiler, $905, 815 14 Ave. SW, Calgary, Alta. T2R 0N5), Bill Wilson. (Calgary Field Naturalists' Society).

JASPER

December 30, 1981. Four "full time" observers plus several others who turned in individual sightings. The four observers covered 35 km by car, 5.2 km on foot and 3.2 km by skis for a total of 16 hours of observations. The temperature was -22°C at 9 am under a thin cloud cover with a light snow falling. There was no wind in town but a strong east wind was blowing nearer the Athabasca River east along Highway 16. The count area encompassed an area with a radius of 12 km, centered on Jasper townsite. Locations checked out included Cottonwood Slough, Pyramid Lake Slough, Cabin Lake, open water on Athabasca River, Lake Annette, Maligne River at Sixth Bridge, trade waste pit, garbage dump, Snaring River road and Old Fort Point. 10 species, 97 individuals.

Observers: Dave Biederman, Jenny Clark, Ben Gadd, Pat and Sue Inglis, Tony Pierce, John Pitcher, Cleone Todgham and Ken Walker (compiler, Box 10, Jasper, Alberta T0E 1E0).

KANANASKIS VALLEY

Center on Kananaskis Boundary Ranger Station, to include Fortress Mountain, Barrier Lake shores, Barrier and McDougall Mountain environs, Evans, Thomas and Lusk Creeks. 4500-6500' elevation. Habitat coverage: lodgepole-spruce-fir forests 80%; aspen forest 20%.

January 2, 1982. 8:30am to 4:30pm. Clear, -22 to -4°F, wind NE 0-0.5 mph, water frozen. Wild food crop excellent.1 observer, 6 hours (2 on foot, 4 by car), 69 miles (2 on foot, 67 by car). Observer: Richard Zammuto (compiler, Kananaskis Environmental Center, University of Calgary, Seebe, Alta. TOL 1X0).

LETHBRIDGE

Lethbridge, Cardston, Claresholm and Vauxhall. December 26, 1981. 8:00 am to 5:00 pm. 41 observers, 143 observer hours, observer miles, 386.5 by car, 32.5 on foot. Count period but not on count day: American Robin, Goshawk, Dark-eyed Junco, Brown Creeper, Common Raven.

Observers: Shirley Arner, Bob and Dale Blair, Dorothy Clark, Betty Haig, Bob, Jacky and Liz Hall, Alice and Frank Harper, Hazel Hudson, Betty and George Luco, Bud and Lois McKillop, Betty and Gordan Merrick, Grant Nelson, Laurel Neubecker, Grace Norgard, Michael O'Shea (compiler, 2401 5 Ave. S., Lethbridge, AB T1J 0X2), Shiela Petherbridge, Doris Rhodes, Alan Roberts, Keith and Shirley Shaw, Troy Stronski, Mary Thomson, Frank Watkins, Cathy, Henry, Patricia, Phillip, Richard and Willie Wiebe, Amanda, Diane, Jessica, John, Joyce and Paul Wilkinson.

RED DEER

December 26, 1981. 23 observers (23 party-hours, 180 km by car, 24 km on foot). 26 species, 4,229 individuals.

Observers: Stuart Johnston, Lloyd Lohr, Fred Schutz, Maxine O'Riordan (compiler, 41 Springfield Avenue, Red Deer, AB T4N 0C8), Anne and Andy Keir, Michael and Jennifer O'Brien, Margaret and Erhling Glabais, Walter and Nellie Savage, Mary and Helen Harris, Eldon and Carol Neufeld, Ken Larson, Linda Cathercole, Albert Pech, Brian Shantz, Wendy Shantz, Marjory and Kerry Wood.

THE SNAKES HEAD

51°47'N 114°40'W, center at center of Sec. 12, T32N, R5W of 5th Meridian, including Bergen, Sundre and Westward Ho as described in 1981; elevation 3400-4300'; habitat coverage as described in 1981.

January 2, 1982. 8:00 am to 5:15 pm. AM mostly cloudy, PM partly cloudy. Temperature -25° to -3°F. Wind mostly SSE 1-5 mph. Snow cover 1-2". Water partly open. Wild food crop good except for the spruce cone crop which was very poor. 15 observers, 12 in 6 parties, 3 at feeders. Party-hours 35 (15 on foot, 20 by car) + 4 at feeders, .75 owling. Party-miles 328 (23 on foot, 305 by car).

Observers: Edward and Louise Christoffersen, Doug, Michael and Paul Collister, Donna and John Dodds, Kathy Glosky, Ferrell Haug, Stuart Johnston (compiler, Wildlife Reserve of Western Canada, Cochrane, Alta. TOL 0W0), Kay Morck, Martha Norquay, Jamey Podlubny, Peter Sherrington and Michael Stanfield.

STETTLER

December 20, 1981. Stettler area, center NE3-39-19-W4, former Streit Bros. farm, 2 miles east of Stettler, and 1 mile north of Highway 12. Habitat coverage: farmland 60%; native parkland and roadsides 30%; farmyards 5%; townsites 5%. Mostly clear, wind SW8 mph to NW 15 mph. Temperature 0° to +4°C. Snow cover scant. Seen during count period but not on count day: Ring-necked Pheasant, Pine Grosbeak, Ruffed

Grouse. Total party-hours 23; party-miles 272 by car, 12.5 on foot.

Observers: Jim Burrell, Bertha Clarke, Elsie Cruikshank, Trudie Grafe, Martin Graham, Bernice and Lloyd Greenlee, Vera Hanson, Art Haywood, Gladys and Wilf Hewlett, Martha and Ron Kruger, Bea and Marvin Lloyd, Lloyd Lohr (compiler, Box 1414, Stettler, Alta.), Virginia Maitland, Bruce and Scott Marshall, George and Grace Neill.

WABAMUN LAKE

Habitat coverage: forest 35%; field 35%; open water 20%; residential 5%; frozen lakes and river 5%.

December 27, 1981. 8:15 am to 16:45 pm. Temperature -25 to -18°C. Wind NNW 0-7 mph, snow 2-8". Fresh water partly open. Wild food crop fair. 14 observers in 7 parties. Party-hours 46.45 (15.75 on foot, 30.70 by car), party-miles 349.5 (24.5 on foot, 325 by car). Fog very heavy on Sundance cooling pond, fairly dense on Wabamun Lake.

Observers: Stuart Arkett, Wai-lin Chee, David Ealey, Rainer Ebel (compiler, 18624 70 Ave., Edmonton, AB T5T 2V8), Graeme Greenlee, Otto Hohn, Ernie Kuyt, Marilyn LaFramboise, Jim Lange, Pat Markovich, Joan Opperthauser, Craig Scharf, Mike Schroeder and Alan Smith.

WEMBLEY

The count was conducted December 19, 1981, by five participants: Gavin and Ellen Craig (compiler), Joe LaValley, and Robert and Lorna Dahl. Approximately 170 miles by truck were covered. Weather was cloudy except for a short time in Beaverlodge when the sun came out. Temperature was -9°C with no wind.

WILDLIFE RESERVE OF WESTERN CANADA

51°26'N 114°35'W, center SW corner Sec. 36 Tp28N R5 W5 north to Water Valley, south to Wildlife Reserve of Western Canada, including Bottrel and stretches of the Little Red Deer River; elevation 3725-5000'; habitat coverage, wooded upland and edge 50%, wooded creek and riverbottom 30%, open farmland 10%, brushy range 9%, farmyard 1%.

January 3, 1982, 8:00am to 5:30pm. AM mostly clear, PM partly cloudy. Temperature -30 to-16°F. Wind ENE 1-6 mph. Snow cover 1-2". Water partly open. Wild food crop good except for spruce cone crop which was poor. 33 observers, 28-32 in 13 parties, 1-5 at feeders. Total party-hours 81 (44.75 on foot, 36.25 by car) + 3 hours at feeders. Party-miles 460 (62 on foot, 398 by car).

Observers: Stuart Alexander, Des Allen, Barry Burrows, Doug and Paul Collister, Sandy Denton, Janet and Olga Droppo, Thomas Erdman, Jean Finley, Stuart Johnston, Jamey Podlubny (compiler, 4520 Bulyea Rd., Calgary, AB T2L 2H3), Ed Quist, Kim Riekki, Laurie and Neil Sedgewick, Barbara, Ian, Mark and Peter Sherrington, Andrew Slater, Dierdre Spencer, Jack Steeves, Don and Philip Stiles, Pearl Stone, Bob Storms, Cleve, Merril and Ray Wershler, Allen Wiseley, Ray and Robert Woods. (Calgary Field Naturalist Society and friends)

OVERHEARD. . .

"Nature has not always been an enemy, but she has rarely been something to be tamed either. At best we have exploited her quickly and moved on. . ."

by William Kilbourn, from "The Quest for the Peaceable Kingdom, reprinted by permission of The Canadian Publishers, McClelland and Stewart Ltd., Toronto

RESULTS OF THE 1981 MAY DAY COUNT (PLANTS)

by J. Derek Johnson
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5320 - 122 St., Edmonton, Alberta T6H 3S5

The following is a tabulation of the results of the botanical portion of the 1981 May Day Count (30-31 May). The method of reporting is the same as that adopted for the 1980 count (Johnson 1981). The areas from which reports were received have been listed in approximate latitudinal order from south to north. Twenty-six reports covering 11 areas were received from the 1981 count, with 68 people participating. The number of reports is a record high since regular counts began in 1976, and the number of participants is second only to the 75 in 1978. A total of 309 species were reported in flower in 1981, eclipsing the 1980 record of 277. Record high totals were reported from many areas of the province.

After studying reports from previous years, it is evident that the number of species reported in flower in any given year is highly correlated with the weather on the count weekend and the number of people participating. The better the weather and the greater the number of participants, the more plants reported in flower. These factors operate independently from the general earliness or lateness of the spring which should be the prime determining factor in the number of species reported in flower. The annual vagaries of the weather and the number of participants make definitive comparisons from year to year difficult. Only general trends can be discerned. The spring of 1980 was the earliest since regular May Day Counts began in 1976, but the spring of 1981 was not far behind. General plant development in 1981 was about 5 to 10 days ahead of an average year and less than a week behind the exceptional spring of 1980. A comparison of some of the 12 key phenology species may help to illustrate this point. Brown-eyed Susan (*Gaillardia aristata*) was reported in flower in 1980, but not in 1981; Common Yarrow (*Achillea millefolium*) was reported from 2 areas in both 1980 and 1981; Northern Bedstraw (*Galium boreale*) was reported from four areas in both years. With the exception of the extreme southern portion of the province, these species do not normally flower at all until from 4 to 15 days later in an average year (averages obtained from Bird 1981).

Following is a list of observers, totals (1980 in brackets) and other pertinent remarks for each area.

1. Lethbridge: Liz and Bob Hall reported 52 (59) species in flower from Six Mile Coulee.

2. Calgary: A thoroughly outstanding effort by the Calgary people resulted in a total of 12 participants, 8 reports and 119 (59) species reported in flower. The number of species reported is the highest total ever for the Calgary area and the second highest for the province as a whole in 1981.

   Jim Posey and Gordon Kerr found 46 species in flower along the Bow River south of the Cominco fertilizer plant near Carseland. Mary Lore and Cathy Osborne listed 45 species in flower from the east side of Nose Hill and near Balzac. The prairie between University Heights and Shaganappi Trail revealed 46 species in flower to Deirdre Spencer, Des Allen and Beryl Hallworth. Margaret Walker and Beryl Hallworth included 29 species in flower in a report covering Montgomery Flats. Martin McNicholl reported 11 species in flower

from below the Bearspaw Dam. A survey along the Bow River west from Bowness Park by Deirdre Spencer and Des Allen recorded 58 species in flower. Art and Mary Fisher reported 17 species in flower at the Brown-Lowery Natural Area near Priddis. Don Stiles found 26 species in flower along his Bluebird Trail east of Didsbury.

3. Bow Valley Provincial Park - Yamnuska: Fourteen observers covered this area submitting two reports including 129 (98) species in flower. This is the highest total number of species recorded in flower from any one area of the province in the history of regular May Day Counts. The previous record was 127 species from the same area in 1977.

Olga Droppo observed 58 species in flower in Bow Valley Provincial Park. A total of 115 species were listed in flower from the Yamnuska area by Evelyn Annand, Elizabeth Beaubien, Don Bourdon, Joyce and Keith Cole, Geoff and Michael Holroyd, Margery McDougall, Mike and Diane McIvor, Bob and Mary Smith and Leonard Woods.

4. Banff-Canmore: A total of 65 (77) species were reported in flower along the Banff-Canmore corridor. The 14 observers included Evelyn Annand, Elizabeth Beaubien, Joyce and Keith Cole, Geoff and Michael Holroyd, Mike and Diane McIvor, Nancy and Kelly Murray, Fred Parkinson, Mary Shaun and Bob and Mary Smith.

5. Red Deer: Three reports were received from this area including 10 participants and 60 (53) species in flower. Nellie and Walter Savage, Evelyn M Guiness, Margaret Glabais and the Pecks observed 28 species in flower in the general Sylvan Lake area, including Jarvis Bay Provincial Park. Fifty-four species were recorded in flower by Chris Bruels, Minnie Cunningham and Helen and Herb Harris at Grassy Lake, 24 km SE of Red Deer.

6. Buffalo Lake: Eighty species in flower were included in two reports from this area. Charles, Ann and Debora Bird, Max Capen and Gordon Hilchie listed 58 (57) species in flower from the Bird farm and Buffalo Lake Narrows area. Lloyd Lohr counted 35 species in flower from an area SW of Stettler.

7. Drayton Valley: Good weather and an inspired search revealed 73 (47) species in flower around Hoople Lake, 33 km N of Drayton Valley. This is the highest number observed for the three years in which this area has been surveyed. Derek Johnson and Steve Zoltai were the observers.

8. Edmonton: A total of five reports were received from the Edmonton area which, when combined, give a total of 117 (79) species in flower. This is the highest number of species ever recorded in flower for the Edmonton area.

Fifty-five (51) species were observed in flower by Derek Johnson at an acreage 13 km WSW of Tofield. Louis and Wesley Hochachka covered the North Saskatchewan River valley at Devon, the Devonian Botanical Gardens and the Clifford E. Lee Nature Sanctuary, reporting 39 (44) species in flower. Patsy Cotterill recorded 36 species in flower from the Rio Terrace area within the City of Edmonton. Jim Lange listed 16 species in flower 10 km NW of Westlock. Two quite different habitats were surveyed by Peter Assmann. Accompanied by Dave Cuthiell and Sylvia L'Hirondelle, fifty species were found in flower on a Saturday visit to a number of wetland areas west and northwest of Edmonton, including the Winterburn bog, Wagner bog, Glenevis bog, Oldman Lake and Majeau Lake. [Many interesting plants can be found in wetland habitats, notably, a number of our native orchids. Such areas have been poorly studied in the past and knowledge on many wetland types is limited. Continued botanical

1981 MAY DAY COUNT - PLANTS IN FLOWER

FAMILY / SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
JUNCAGINACEAE (Arrow-grass Family)												
Triglochin maritima	Seaside Arrow-grass			+	+		+				+	+
GRAMINEAE (Grass Family)												
Bromus inermis	Awnless Brome								+			
Festuca scabrella	Northern Rough Fescue		+									
Hierochloe odorata	Sweet Grass		+				+	+	+	+	+	
Oryzopsis asperifolia	White-grained Mountain Rice Grass							+				
Poa annua	Annual Blue Grass									+		
P. pratensis	Kentucky Blue Grass								+			
CYPERACEAE (Sedge Family)												
Carex sp.	Sedge			+	+							
C. aquatilis	Water Sedge							+	+	+		
C. aurea	Golden Sedge		+	+	+		+					
C. crawfordii	Crawford's Sedge							+	+			
C. filifolia	Thread-leaved Sedge		+									
C. foenea	Hay Sedge						+	+	+			
C. gynocrates	Northern Bog Sedge							+				
C. lasiocarpa	Hairy-fruited Sedge						+					
C. obtusata	Blunt Sedge						+					
C. raymondii	Raymond's Sedge							+				
C. richardsonii	Richardson's Sedge							+				
C. rostrata	Beaked Sedge						+			+		
C. sartwellii	Sartwell's Sedge							+	+			
C. vaginata	Sheathed Sedge							+				
C. viridula	Green Sedge						+					
Eleocharis acicularis	Needle Spike-rush			+			+					
E. palustris	Creeping Spike-rush						+		+	+		+
Eriophorum sp.	Cotton-grass								+			
E. scheuchzeri	One-spike Cotton-grass										+	

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
Scirpus americanus	Three-square Bulrush						+					
S. nevadensis	Nevada Bulrush						+					
S. validus	Common Great Bulrush						+					
ARACEAE (Arum Family)												
Calla palustris	Water-Arum							+	+		+	
LILIACEAE (Lily Family)												
Allium schoenoprasum	Wild Chives		+									
A. textile	Prairie Onion	+	+			+	+					
Disporum trachycarpum	Fairybells		+	+		+	+	+	+		+	+
Maianthemum canadense	Wild Lily-of-the-Valley					+			+	+	+	+
Smilacina racemosa	False Solomon's-seal		+	+		+	+				+	
S. stellata	Star-flowered Solomon's-seal											
S. trifolia	Three-leaved Solomon's-seal		+	+	+	+	+	+	+	+	+	+
Zygadenus gramineus	Death Camas		+					+			+	+
IRIDACEAE (Iris Family)												
Sisyrinchium montanum	Common Blue-eyed Grass	+	+	+	+	+	+	+	+		+	+
S. sarmentosum	Blue-eyed Grass		+									
ORCHIDACEAE (Orchid Family)												
Calypso bulbosa	Venus-slipper		+	+							+	+
Corallorhiza striata	Striped Coralroot			+								
C. trifida	Pale Coralroot		+	+	+		+		+		+	+
Cypripedium calceolus	Yellow Lady's-slipper		+	+		+			+			
Habenaria obtusata	Small Northern Bog Orchid				+						+	
H. viridis	Long-bracted Bog Orchid		+	+		+			+		+	+
Listera borealis	Northern Twayblade											
L. cordata	Heart-leaved Twayblade								+			+
Orchis rotundifolia	Round-leaved Orchid								+			

FAMILY / SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
SALICACEAE (Willow Family)												
Salix sp.	Willow			+		+					+	+
S. arctica	Arctic Willow			+								
S. bebbiana	Beaked Willow		+									
S. exigua	Gray Sandbar Willow	+										
S. glauca	Smooth Willow						+					
S. interior	Sandbar Willow								+			
S. petiolaris	Basket Willow							+				
S. pseudomonticola	Mountain Willow							+				
S. pyrifolia	Balsam Willow							+				
BETULACEAE (Birch Family)												
Alnus crispa	Green Alder			+	+						+	+
Betula glandulosa	Dwarf Birch			+							+	
B. occidentalis	River Birch			+			+				+	+
B. papyrifera	White Birch			+								
B. pumila	Swamp Birch							+				
SANTALACEAE (Sandalwood Family)												
Comandra pallida	Bastard Toadflax	+	+	+	+	+			+			+
Geocaulon lividum	Northern False Toadflax			+	+			+	+			+
LORANTHACEAE (Mistletoe Family)												
Arceuthobium americanum	American Mistletoe										+	
POLYGONACEAE (Buckwheat Family)												
Eriogonum flavum	Yellow Umbrellaplant	+	+									
Polygonum achoreum	Striate Knotweed								+			
P. aviculare	Doorweed								+			
CHENOPODIACEAE (Goosefoot Family)												
Eurotia lanata	Winterfat	+										
Monolepis nuttalliana	Spear-leaved Goosefoot								+			

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
CARYOPHYLLACEAE (Pink Family)												
Arenaria capillaris	Sandwort			+								
A. lateriflora	Broad-leaved Sandwort		+	+		+	+	+	+	+	+	+
Cerastium arvense	Field Chickweed	+	+	+	+	+	+		+		+	+
C. nutans	Long-stalked Chickweed							+				
C. vulgatum	Mouse-ear Chickweed										+	
Paronychia sessiliflora	Low Whitlowwort		+									
Silene noctiflora	Night-flowering Catchfly											+
Stellaria longifolia	Long-leaved Stitchwort		+									
S. longipes	Long-stalked Stitchwort		+	+	+	+	+	+	+			+
S. media	Common Chickweed								+			
NYMPHAEACEAE (Water-lily Family)												
Nuphar variegatum	Yellow Pond-lily								+			
RANUNCULACEAE (Buttercup Family)												
Actaea rubra	Baneberry		+	+	+	+	+	+	+	+		+
Anemone canadensis	Canada Anemone	+	+	+		+	+		+			+
A. cylindrica	Long-fruited Anemone						+					
A. multifida	Cut-leaved Anemone	+	+	+	+	+				+		
A. parviflora	Small Wood Anemone		+	+	+							
A. patens	Prairie Crocus		+	+	+							
Aquilegia brevistyla	Small-flowered Columbine			+		+			+		+	+
A. formosa	Crimson Columbine										+	
Caltha palustris	Marsh Marigold							+	+	+		+
Clematis verticellaris	Purple Virgin's-bower		+	+		+			+			
Coptis trifolia	Goldthread				+							+
Delphinium bicolor	Low Larkspur		+									
Ranunculus abortivus	Smooth-leaved Buttercup			+				+	+			+
R. acris	Tall Buttercup		+	+	+		+	+				
R. aquatilis	Large-leaved Watercrowfoot						+					
R. cardiophyllus	Heart-leaved Buttercup			+		+	+					
R. cymbalaria	Seaside Buttercup					+	+	+	+			
R. gmelinii	Small Yellow Watercrowfoot					+			+			
R. macounii	Macoun's Buttercup		+					+				

FAMILY SCIENTIFIC NAME	COMMON NAME	Lc. Ibridge	Ca. Bary	Bor. Valley P.P.-Yamuska	Baiff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
Ranunculus rhomboideus	Prairie Buttercup		+	+		+	+				+	
R. sceleratus	Celery-leaved Buttercup							+	+	+		
Thalictrum occidentale	Western Meadow-rue											+
T. venulosum	Veiny Meadow-rue		+	+	+	+		+	+	+	+	+
FUMARIACEAE (Fumitory Family)												
Corydalis aurea	Golden Corydalis		+	+	+	+			+	+	+	+
CRUCIFERAE (Mustard Family)												
Arabis sp.	Rock Cress											+
A. divaricarpa	Purple Rock Cress			+	+							
A. drummondii	Drummond's Rock Cress			+								
A. hirsuta	Hairy Rock Cress		+	+					+			
A. holboellii	Reflexed Rock Cress	+	+	+	+							
Barbarea vulgaris	Yellow Rocket		+	+								
Brassica juncea	Indian Mustard									+		
B. kaber	Wild Mustard		+						+			
Braya humilis	Braya		+	+								
Capsella bursa-pastoris	Shepherd's-purse		+	+			+		+	+	+	
Cardamine pensylvanica	Bitter Cress							+				
Descurainia pinnata	Short-fruited Tansy Mustard	+	+									
D. sophia	Flixweed	+	+	+			+		+		+	
Draba aurea	Golden Whitlow-grass			+								
D. cana	White Whitlow-grass			+								
D. nemorosa	Yellow Whitlow-grass		+	+			+		+			
Erysimum asperum	Western Wallflower			+								
E. cheiranthoides	Wormseed Mustard			+	+							
E. inconspicuum	Small-flowered Prairie-Rocket	+	+	+		+						
Lepidium densiflorum	Common Pepper-grass								+			
Lesquerella arenosa	Sand Bladderpod		+									
Physaria didymocarpa	Twin Bladderpod			+	+							
Rorippa islandica	Marsh Yellow Cress			+				+				

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
Rorippa nasturtium-aquaticum	Water Cress				+							
Sisymbrium altissimum	Tumbling Mustard		+									
Thlaspi arvense	Stinkweed	+	+	+	+		+	+	+	+	+	+
CRASSULACEAE (Orpine Family)												
Sedum rosea	Rose-root			+								
SAXIFRAGACEAE (Saxifrage Family)												
Chrysosplenium iowense	Golden Saxifrage							+	+			+
Heuchera richardsonii	Richardson's Alum-root		+									
Mitella nuda	Bishop's-cap					+		+	+	+	+	
Ribes americanum	American Black Currant						+		+	+		+
R. aureum	Golden Currant	+	+									+
R. glandulosum	Skunk Currant							+				+
R. hirtellum	Northern Gooseberry							+		+		+
R. hudsonianum	Northern Black Currant				+			+	+	+		
R. lacustre	Swamp Gooseberry										+	
R. oxyacanthoides	Northern Gooseberry		+	+	+	+	+	+			+	
R. triste	Swamp Red Currant					+		+	+			+
Saxifraga bronchialis	Spotted Saxifrage			+								
S. oppositifolia	Purple Saxifrage			+								
ROSACEAE (Rose Family)												
Amelanchier alnifolia	Saskatoon		+	+	+	+	+	+	+		+	+
Chamaerhodos erecta	Chamaerhodos		+									
Crataegus chrysocarpa	Round-leaved Hawthorn								+			
Dryas drummondii	Yellow Mountain-avens			+	+							
D. hookeriana	White Mountain-avens			+								
Fragaria vesca	Woodland Strawberry			+							+	+
F. virginiana	Smooth Wild Strawberry			+	+		+	+	+	+	+	+
Geum aleppicum	Yellow Avens									+		
G. rivale	Purple Avens							+	+			
G. triflorum	Three-flowered Avens				+		+				+	
Potentilla anserina	Silverweed	+	+	+		+	+		+			+
P. concinna	Early Cinquefoil		+	+								

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
Potentilla diversifolia	Smooth-leaved Cinquefoil			+								
P. fruticosa	Shrubby Cinquefoil		+	+								+
P. gracilis	Graceful Cinquefoil				+							
P. nivea	Snow Cinquefoil			+								
P. norvegica	Rough Cinquefoil								+			+
P. pensylvanica	Prairie Cinquefoil	+		+								
Prunus pensylvanica	Pin Cherry			+		+		+	+			+
P. virginiana	Black-fruited Choke Cherry	+	+	+		+	+	+	+			+
Rosa acicularis	Prickly Rose		+	+			+		+	+	+	+
R. arkansana	Low Prairie Rose	+									+	
R. woodsii	Wood's Rose	+					+				+	
Rubus acaulis	Stemless Raspberry			+	+	+		+	+	+	+	+
R. chamaemorus	Cloudberry							+	+		+	+
R. pubescens	Dewberry			+		+		+	+	+	+	+
R. strigosus	Wild Red Raspberry			+		+			+	+	+	
Sorbus scopulina	Western Mountain Ash										+	
LEGUMINOSAE (Pea Family)												
Astragalus sp.	Milk-vetch					+						
A. aboriginum	Indian Milk-vetch			+	+							
A. agrestis	Purple Milk-vetch		+	+			+		+		+	
A. bisulcatus	Two-grooved Milk-vetch	+	+									
A. crassicarpus	Ground-plum		+									
A. decumbens	Timber Milk-vetch		+	+	+							
A. drummondii	Drummond's Milk-vetch	+	+	+			+					
A. eucosmus	Milk-vetch											+
A. missouriensis	Missouri Milk-vetch	+										
A. pectinatus	Narrow-leaved Milk-vetch	+										
A. striatus	Ascending Purple Milk-vetch	+	+	+	+		+					
A. tenellus	Loose-flowered Milk-vetch	+		+								
Caragana arborescens	Common Caragana		+				+		+			
Hedysarum alpinum	American Hedysarum		+								+	
H. mackenzii	Mackenzie's Hedysarum	+	+	+	+				+			+
H. sulphurescens	Yellow Hedysarum			+								

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P. Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
Lathyrus ochroleucus	Yellow Peavine		+	+	+	+	+	+	+	+	+	+
Medicago falcata	Yellow Lucerne		+									
M. lupulina	Black Medick	+			+							
M. sativa	Alfalfa	+							+			
Melilotus officinalis	Yellow Sweet-clover	+							+			
Onobrychis viciaefolia	Sainfoin										+	
Oxytropis sericea	Early Yellow Locoweed	+	+	+	+		+				+	
O. splendens	Showy Locoweed		+	+							+	
O. viscida	Sticky Locoweed	+	+	+	+							
Psoralea esculenta	Indian Breadroot		+									
Thermopsis rhombifolia	Golden-bean	+	+	+		+	+		+			
Trifolium hybridum	Alsike Clover								+			
T. repens	White Clover						+	+	+	+		+
Vicia americana	American Vetch	+	+			+	+	+	+	+	+	
V. sparsifolia	Narrow-leaved Vetch		+									
GERANIACEAE (Geranium Family)												
Geranium bicknellii	Bicknell's Geranium											
G. richardsonii	Wild White Geranium			+								
G. viscosissimum	Sticky Purple Geranium		+			+						
LINACEAE (Flax Family)												
Linum lewisii	Wild Blue Flax	+	+	+			+					
L. rigidum	Large-flowered Yellow Flax		+									
POLYGALACEAE (Milkwort Family)												
Polygala paucifolia	Fringed Milkwort											+
P. senega	Seneca Snakeroot			+		+						
ANACARDIACEAE (Sumac Family)												
Rhus trilobata	Skunkbush		+									
ACERACEAE (Maple Family)												
Acer glabrum	Mountain Maple			+								

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
RHAMNACEAE (Buckthorn Family)												
Rhamnus alnifolia	Alder-leaved Buckthorn											+
MALVACEAE (Mallow Family)												
Sphaeralcea coccinea	Scarlet Mallow	+	+				+					
VIOLACEAE (Violet Family)												
Viola adunca	Early Blue Violet		+	+	+	+	+	+	+		+	+
V. nephrophylla	Bog Violet			+		+	+		+	+	+	+
V. nuttallii	Yellow Prairie Violet		+									
V. palustris	Marsh Violet					+	+		+			
V. pedatifida	Crowfoot Violet		+									+
V. renifolia	Kidney-leaved Violet			+	+							
V. rugulosa	Western Canada Violet		+	+	+	+	+	+	+	+	+	+
ELAEAGNACEAE (Oleaster Family)												
Elaeagnus commutata	Silverberry	+	+	+			+		+		+	+
Shepherdia canadensis	Canada Buffaloberry			+	+			+				
ONAGRACEAE (Evening Primrose Family)												
Oenothera caespitosa	Butte Primrose	+										
ARALIACEAE (Ginseng Family)												
Aralia nudicaulis	Wild Sarsaparilla					+	+	+	+	+		+
UMBELLIFERAE (Carrot Family)												
Lomatium macrocarpum	Long-fruited Parsley		+								+	
Musineon divaricatum	Leafy Musineon		+	+								
Osmorhiza depauperata	Sweet Cicely			+								
O. longistylis*	Smooth Sweet Cicely								+			
Zizia aptera	Heart-leaved Alexanders		+	+	+	+	+	+	+			

* This report is accepted with reservations. O. longistylis is listed as one of the rare vascular plants of Alberta by Argus and White (1978). Although Edmonton is a known locality for the species, the identification requires confirmation.

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
CORNACEAE (Dogwood Family)												
Cornus canadensis	Bunchberry			+		+		+	+		+	+
C. stolonifera	Red-osier Dogwood		+	+		+	+	+	+	+	+	+
PYROLACEAE (Wintergreen Family)												
Pyrola asarifolia	Common Pink Wintergreen										+	
P. virens	Greenish-flowered Wintergreen										+	
ERICACEAE (Heath Family)												
Andromeda polifolia	Bog-Rosemary											+
Arctostaphylos rubra	Alpine Bearberry			+								
A. uva-ursi	Common Bearberry		+	+	+			+	+			+
Chamaedaphne calyculata	Leatherleaf											+
Kalmia polifolia	Pale Laurel											+
Ledum groenlandicum	Common Labrador Tea							+	+		+	+
Oxycoccus microcarpus	Swamp Cranberry							+	+		+	+
Vaccinium caespitosum	Dwarf Bilberry										+	
V. myrtilloides	Blueberry							+	+		+	+
V. vitis-idaea	Dry-ground Cranberry							+	+		+	+
PRIMULACEAE (Primrose Family)												
Androsace chamaejasme	Sweet-flowered Androsace			+	+							
A. septentrionalis	Pygmyflower		+	+	+	+			+		+	
Dodecatheon conjugens	Mountain Shootingstar		+	+	+							
D. radicatum	Saline Shootingstar		+	+		+	+					+
Primula incana	Mealy Primrose								+			
P. mistassinica	Dwarf Primrose				+							
Trientalis borealis	Northern Starflower							+	+		+	+
GENTIANACEAE (Gentian family)												
Menyanthes trifoliata	Buck-bean			+								+
APOCYNACEAE (Dogbane Family)												
Apocynum androsaemifolium	Spreading Dogbane		+									

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drumheller Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
POLEMONIACEAE (Phlox Family)												
Phlox hoodii	Moss Phlox	+	+									
BORAGINACEAE (Borage Family)												
Cryptantha bradburiana	Clustered Cryptanthe	+										
Cynoglossum officinale	Hound's-tongue	+	+									
Lappula echinata	Bluebur		+						+			+
L. redowskii	Western Bluebur	+		+								+
Lithospermum incisum	Narrow-leaved Puccoon	+	+		+							
L. ruderale	Woolly Gromwell		+	+								
Mertensia paniculata	Tall Lungwort			+		+		+	+	+	+	+
Onosmodium occidentale	Western False Gromwell		+									
LABIATAE (Mint Family)												
Glecoma hederacea	Ground-ivy								+			
Moldavica parviflora	American Dragonhead								+			+
SCROPHULARIACEAE (Figwort Family)												
Castilleja miniata	Red Indian Paintbrush			+	+						+	
C. raupii	Purple Paintbrush											+
C. septentrionalis	Common Yellow Paintbrush		+									
Collinsia parviflora	Blue-eyed Mary			+	+							
Linaria vulgaris	Butter-and-Eggs		+									
Penstemon albidus	White Beardtongue	+										
P. nitidus	Smooth Blue Beardtongue	+	+	+								
P. procerus	Slender Blue Beardtongue					+	+				+	
LENTIBULARIACEAE (Bladderwort Family)												
Pinguicula vulgaris	Common Butterwort				+							
PLANTAGINACEAE (Plantain Family)												
Plantago eriopoda	Saline Plantain						+					

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
RUBIACEAE (Madder Family)												
Galium boreale	Northern Bedstraw		+				+		+		+	
CAPRIFOLIACEAE (Honeysuckle Family)												
Lonicera dioica	Twining Honeysuckle				+	+						+
L. involucrata	Bracted Honeysuckle			+	+			+	+	+	+	+
L. tartarica	Tartarian Honeysuckle								+			
L. villosa	Fly Honeysuckle											+
Viburnum edule	Low Bush-cranberry			+		+		+	+	+	+	
V. trilobum	High Bush-cranberry										+	
ADOXACEAE (Moschatel Family)												
Adoxa moschatellina	Moschatel							+				+
VALERIANACEAE (Valerian Family)												
Valeriana septentrionalis	Northern Valerian			+				+				
COMPOSITAE (Composite Family)												
Achillea millefolium	Common Yarrow	+					+					
Agoseris glauca	False Dandelion		+									
Anaphalis margaritacea	Pearly Everlasting						+					
Antennaria sp.	Everlasting					+						
A. neglecta	Broad-leaved Everlasting	+		+	+		+	+	+			
A. nitida	Small-flowered Everlasting		+	+	+		+		+		+	
A. parvifolia	Small Everlasting		+	+								
A. pulcherrima	Showy Everlasting		+		+							
A. rosea	Rosy Everlasting			+	+		+				+	+
Arnica cordifolia	Heart-leaved Arnica		+	+	+						+	
A. lonchophylla	Spear-leaved Arnica			+								
Chrysanthemum leucanthemum	Ox-eye Daisy								+			
Crepis tectorum	Narrow-leaved Hawk's-beard						+		+		+	
Erigeron caespitosus	Tufted Fleabane			+		+						
E. compositus	Compound Fleabane			+	+							
E. glabellus	Smooth Fleabane						+				+	

FAMILY SCIENTIFIC NAME	COMMON NAME	Lethbridge	Calgary	Bow Valley P.P.-Yamnuska	Banff-Canmore	Red Deer	Buffalo Lake	Drayton Valley	Edmonton	Athabasca	Grande Prairie	Fort McMurray
Erigeron philadelphicus	Philadelphia Fleabane								+			
Hymenoxys acaulis	Stemless Rubberweed	+										
H. richardsonii	Colorado Rubberweed	+										
Iva axillaris	Povertyweed	+							+			
Matricaria matricarioides	Pineappleweed			+	+							+
Petasites sagittatus	Arrow-leaved Colt's-foot			+	+							
Senecio canus	Silvery Groundsel	+	+	+	+		+			+		+
S. congestus	Marsh Ragwort								+	+	+	+
S. vulgaris	Common Groundsel		+	+	+				+			
Taraxacum ceratophorum	Dandelion		+									+
T. laevigatum	Red-seeded Dandelion		+									
T. officinale	Common Dandelion	+	+	+	+	+	+	+	+	+	+	+
Townsendia sericea	Low Townsendia			+	+							
Tragopogon dubius	Yellow Goat's-beard		+						+			

Total number of species: 309

surveys in these habitats are encouraged.] Sunday observations in a number of Edmonton's parks and ravines, including "Skunk Hollow", Queen Elizabeth Park, Kinsmen Park, Emily Murphy Park and Hawrelak Park revealed 54 species in flower.

9. Athabasca: Patsy Coterill reported 38 species in flower in the Colinton-Boyle-Long Lake Provincial Park area SE of Athabasca.

10. Grande Prairie: A record high total for the area of 88 (61) species in flower was recorded by Gavin and Ellen Craig, Lorna Dahl, and Joe LaValley. Observations were made in the general Wembley-Grande Prairie area.

11. Fort McMurray: The Fort McMurray group slipped from their number one position of last year to fourth place in the overall standings, but still managed a very respectable 90 (103) species in flower. This is the second highest total for a single report after Yamnuska. Observers included Lois Connell, Pat Connelly, Marion Horrocks, Joyce Hunt, Kevin Kennedy, Joan Rykes and Lydia Zingle.

In the interest of introducing some consistency to this and subsequent reports, plant common names in the following species listing have been taken from Looman and Best (1979). While some of the names may be unfamiliar to many readers, this source was chosen because the authors at least attempt to give most plants a common name, something which few other books covering our area have tried to do. Hopefully, this will simplify tracking down a particular plant by its common name in the future. Scientific nomenclature, as in the past, follows Moss (1959).

LITERATURE CITED

Argus, G.W. and D.J. White. 1978. The rare and vascular plants of Alberta. Bot. Div. Nat. Mus. of Nat. Sci., Ottawa. Syllogeus Ser. No. 17.

Bird, C.D. 1981. 1980 Alberta flowering dates. Alta. Nat. 11, Suppl. 1: 7.

Johnson, J.D. 1981. Results of the 1980 May Day Count (Plants). Alta. Nat. 11, Suppl. 1: 34-48.

Looman, J. and K.J. Best. 1979. Budd's Flora of the Canadian Prairie Provinces. Res. Branch, Agri. Can., Ottawa. Public. 1666. 863 pp.

Moss, E.H. 1959. Flora of Alberta. Univ. of Toronto Press, Toronto. 546 pp.

1981 ALBERTA FLOWERING DATES

by C. D. Bird
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This is the ninth year of operation of the FAN Phenology Project. The results of the past year, 1981, are included in this article while those of previous years are in earlier issues of the Alberta Naturalist (4:7-14; 5:4-23; 6:3-27; 7:11-19; 8:9-26; 9: Suppl. 2-19; 10: Suppl. 5-8; and 11: Suppl. 3-7).

The purpose of the project is to gather data which will, among other things, show (1) how early or late a particular spring is; (2) how weather effects natural events; (3) how floristic events compare with faunistic ones; (4) allow the preparation of long-term averages; and (5) provide "go-ahead" dates for various gardening and agricultural activities.

Table 1 contains all Alberta flowering dates reported for 1981. They are arranged according to the following areas: Waterton Lakes National Park - Sofa Mountain, Stony Creek; Milk River - Lost River, Orion; Lethbridge - Community College, Fort Whoop-up Lookout, Nature Reserve, 6-mile Coulee, University of Lethbridge; Porcupine Hills - Beaver Creek, Head-bashed-in Buffalo Jump, Skyline Trail; Turner Valley - Brown-Lowery Natural Area, 10 miles west of Cayley; Calgary - Beryl's Prairie, Confederation Park, Fish Creek, Montgomery Flats, Nose Hill, Weaselhead; Canmore - Bow Valley Provincial Park, Canmore, Exshaw, Seebe, Wind Ridge, Yamnuska Natural Area; Drumheller - Beynon; Banff National Park - Banff, Vermilion Lakes; Red Deer - Horn Hill, Red Deer, Rimbey; Rocky Mountain House - Drayton Valley; Stettler - Mirror, Stettler; Edmonton - Elk Island National Park, Edmonton; Whitecourt - Edson, Hinton, Whitecourt; Athabasca - Athabasca, Swan Hills; Cold Lake - Lac la Biche; Peace River - Grande Prairie, Peace River, Wembley; and Fort McMurray - Fort McMurray.

Table 2 compares the first flowering dates for 1981 with the long-term average first dates in the six best reported areas. Fewer observations have been made in the Red Deer, Edmonton and Peace River areas with the result that the dates that appear are somewhat less reliable than those for other areas. They also tend to be a little later than was actually the case. One must remember that the dates in both Tables are simply those that were sent in and that, because of the spottiness of reporting, first and last dates often do not indicate the true extremes. Also, flowering in some locations in an Area is earlier than in others.

A glance at Table 2 shows that spring 1981 started out considerably earlier than average due to low winter snowfalls and warm spring temperatures. Dates continued early in the four northern areas while substantial rains from Calgary south favored vegetative growth and abundant, but later, flowering. Liz Hall wrote, on 2 May of 6-mile Coulee at Lethbridge, "It's going to be a great berry year - lots of flowers, and now this rain". It was a great berry year in the south but not so in central and eastern Alberta which failed to get the rain. Liz later (5 July) wrote of the Sofa Mountain trail, Waterton Lakes National Park, "134 species. . . best ever on one single hike! What an incredible, gorgeous, marvellous, stupendous year for flowers".

J.D. Johnson will list the 61 persons who took part in recording "plants in

TABLE 1. 1981 flowering dates of the twelve key species in all Alberta areas for which there were reports.

	Prairie Crocus	Aspen	Early Blue Violet	Golden Bean	Saskatoon	Star-flowered Solomon's Seal	Choke Cherry	Yellow Pea Vine	Northern Bedstraw	Common Yarrow	Western Wood Lily	Brown-eyed Susan
Waterton Lakes National Park			Jy5		Jy5	Jy5	Jy5	Jy5-12	Jy5	Jy5-Au23		Jy5-Au23
Milk River				Jn20						Jn20		Jn20
Lethbridge	Apr4-18			Ap4-My31	My2-17	My12-17	My12-31	My31		My30-Se20		My31-Jy4
Porcupine Hills			Jn6		Jn6	Jn6		Jn6	Jn6	Jn6-Se7		Jn6-Se7
Turner Valley			My24-Jn17	My24-Jn17	My24-Jn17	Jn17		Jn17	Jn17			
Calgary	Mr8-My31	Ap1-25	Ap28-Jn6 Au8	Ap25-Jy8	My18-Jn6	My18-Jn21	My30-Jn21	My30-Jy11	My30-Au8	Jn15-Se20	Jy4-11	Jn18-Se6
Canmore	Mr24-Jn18	Ap1	Ap26-Jn19	My30-Jn19	My30-31	My30-Jy2	My30-31	My30-Jy2	Jn19-Au27	Jn19-Se20	Jn19-28	Jn19-Se20
Drumheller	Mr24-Ap20	Ap21	My10-20	Ap29-My15	My5-23	My9-30	My20-30		Jn15-Jy25	Jn10-Jy15	Jn25-Jy8	Jn18-Jy31
Banff National Park	My30-31		My30-31		My30-31	My30-Jn27		My30-Jn27	Jn27			
Red Deer	Mr22-My13	Mr30-Ap24	Ap24-My31	My9-31	My12-31	My20-Jn15	My19-31	My5-Jn28	My31-Se3	Jn16-Oc16	Jn17	Jy15-Au9

TABLE 1. (continued)

	Prairie Crocus	Aspen	Early Blue Violet	Golden Bean	Saskatoon	Star-flowered Solomon' Seal	Choke Cherry	Yellow Pea Vine	Northern Bedstraw	Common Yarrow	Western Wood Lily	Brown-eyed Susan
Rocky Mountain House			My30-Jn10		My30-Jn10	My30-Jn19	My30-Jn10	My30-Jn19	Jn10-19	Jn8-19		
Stettler	Mr28-My2	Ap12-22	Ap27-My16	My4-Jn22	My2-24	My20-Jn5	My15-Jn5	My23-Jn22	Jn1-22	Jn14-22	Jn6-22	Jn19-Au10
Edmonton		Ap5-25	My1-Jn11	My15-Jn2	My9-Jn2	My19-Jn22	My15-Jn16	My3-Jy1	My30-Jy15	Jn10-Oc2	Jn22-Jy15	Jy6-Se4
Whitecourt			Jn8-19		Jn8-19	Jn16-22	Jn16-19	Jn8-Jy1	Jn22-Jy1	Jn18-Se24	Jn22-Jy1	
Athabasca						My30-31		My30-Jy14	Jn25-Jy14	Jn25-Jy14	Jy13-14	
Cold Lake							Jy10	Jy10	Jy7-13	Jy7-13	Jy7-13	
Peace River	Ap14-My15	My2	My7-Jn23		My17-Jn6	My21-Jn6	My29-Jn8	My29-Jn25	My30-Jn25	Jn14-25	Jn11-25	Jy29
Fort McMurray			My30-31		My30-31	My30-31	My30-31					

TABLE 2. First flowering dates for 1981 of the twelve key species in the six best-reported Alberta areas. Averages cover the nine years from 1973 through 1981 except where indicated by a lower number. The plus and minus figures indicate how much earlier or later the 1981 date was from the average.

		Lethbridge Area		Calgary Area		Red Deer Area		Stettler Area		Edmonton Area		Peace River Area	
Prairie Crocus	1981	Ap4	+6	Mr8	+23	Mr22	+20	Mr28	+15			Ap4	+11
	9-yr avg	Ap10		Mr31		Ap11		Ap12(8)		Ap16(6)		Ap15(7)	
Aspen	1981			Ap1	+2	Mr30	+26	Ap12	+6	Ap5	+10	My2	-3
	9-yr avg	Ap4(1)		Ap3		Ap25		Ap18(7)		Ap15		Ap29(4)	
Early Blue Violet	1981			Ap28	+1	Ap24	+12	Ap27	+3	My1	+3	My7	+2
	9-yr avg	My8(6)		Ap29		My6		Ap30(8)		My4		My9(6)	
Golden Bean	1981	Ap4	+17	Ap25	+2	My9	0	My4	+1	My15	-4		
	9-yr avg	Ap21		Ap27		My9		My5(8)		My11(6)		My27(1)	
Saskatoon	1981	My2	+6	My19	-6	My12	+5	My2	+11	My9	+5	My17	-5
	9-yr avg	My8		My10		My17		My13(8)		My14		My12(6)	
Star-flowered Solomon's Seal	1981	My12	+4	My18	-5	My20	+6	My20	+7	My19	+7	My21	+4
	9-yr avg	My16(8)		My13		My26		My27(8)		My26		My25(6)	
Choke Cherry	1981	My12	+9	My30	-8	My19	+8	My15	+7	My15	+6	My29	-10
	9-yr avg	My21		My22		My27		My22(8)		My21		My19(6)	
Yellow Pea Vine	1981	My31	+3	My30	0	My5	+22	My23	+6	My3	+18	My29	+1
	9-yr avg	Jn3(4)		My30		My27(8)		My29(7)		My21		My30(6)	
Northern Bedstraw	1981			My30	+6	My31	+15	Jn1	+8	My30	+11	My30	+12
	9-yr avg	Jn13(5)		Jn5		Jn15(8)		Jn9(8)		Jn10		Jn11(6)	
Common Yarrow	1981	My30	0	Jn15	-10	Jn16	+2	Jn14	0	Jn10	+4	Jn14	0
	9-yr avg	My30		Jn5		Jn18(8)		Jn14(8)		Jn18		Jn14(6)	
Western Wood Lily	1981			Jy4	-15	Jn17	+5	Jn16	+9	Jn22	+2	Jn11	+4
	9-yr avg			Jn19		Jn22(8)		Jn25(8)		Jn24(8)		Jn16(6)	
Brown-eyed Susan	1981	My31	-2	Jn18	-3	Jy15	-15	Jn19	+5	Jy6	+1	Jy29	-15
	9-yr avg	My29(8)		Jn15		Jn30(8)		Jn24(8)		Jy7(8)		Jy14(4)	

flower" during the May Day Count. Aside from this event, the following persons contributed observations during 1981: D. Allen, P. Assmann, Myrtle Biggs, C.D. Bird, M. Capen, D. Carlyle, Vanny Case, Margaret Clark, Joyce Cole, K. Cole, Ellen Craig, G. Craig, W. Finlay, K. Goble, Gertrude Grafe, Liz Hall, R. Hall, Beryl Hallworth, Helen Harris, J.D. Johnson, Mary Lore, J. Powell, L. Proudfoot, Stephany Proudfoot, Mary Smith and R. Smith.

Your active support is requested as the project continues in 1982. Please participate even if you can provide only a few dates. A reporting form was enclosed as the back page of the Alberta Naturalist, March 1982, and another tear-out back page is provided at the back of this issue. Please remove it, pin it on a bulletin board or other handy place and jot down dates as the season progresses. At the end of the summer, please mail it to the FAN Phenology Coordinator. Extra copies of the form may be obtained from the Coordinator or through member clubs. Though designed especially for use on a farm, acreage, natural area or other special place, the form can also be used on once-only field trips to areas of particular interest, e.g. Hand Hills, and participants are urged to do so as the date obtained may not otherwise be recorded.

RESULTS OF THE MAY DAY COUNT (BIRDS AND MAMMALS)

by Allen N. Wiseley
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The May 30-31 week-end weather started well, with widespread sunshine dominating most of the province on Saturday. The intense heat generated some afternoon thundershowers and, in some cases, this continued into Sunday. Good weather lasted into the 31st in Fort McMurray, Lethbridge and Red Deer, but was generally cooler and windier. A general rain in Grande Prairie on Saturday kept participants indoors much of the day and through the morning on Sunday. The warm week-end was fairly welcome, especially in southern Alberta, which had seen rain and snow in large amounts over much of the month. May was a wet month following an amazingly warm, dry winter and early spring. The increased moisture did not come early enough for waterfowl nesting and shorebird stopovers, but may have salvaged an otherwise disasterously dry year up until then.

RESULTS - BIRDS

Statistics for the province are listed below:

	% change from 1980
Count Areas: 7	0
Observers: 132 (+32 students)	+57.5
Observer Hours: 745	N/A
Number of Species: 207	+2.5
Number of Individual Birds: 65,000	+40.4

Participation on the 1981 count increased markedly over 1980 when rain had interferred with southern Alberta efforts. The total of 132 observers was still short of the 1979 count that attracted 188 people. Only 7 major counts were reported, down from 8 in 1980. We regained the count at Grande Prairie, but received no reports

from Banff and Yamnuska which, apparently, suffered low turnouts. Similarly, total observers (745) were down almost half from the previous record of 1328 set in 1979. We still managed a respectable 202 species which beat 1980's total of 201, and came up with an admirable increase of 40 per cent in total numbers of birds seen (65,000), well beyond the 1979 record of 50,300.

Table 1 presents the totals for each species by count area. Also included on the table are symbols indicating the relative change in the recorded numbers of each species from the 1980 totals.

There were five new species added to the May Day Species Count list in 1981. These were Greater Scaup (Calgary), Black-necked Stilt (Lethbridge), Great Gray Owl (Grande Prairie), Blue Grouse (Calgary), and Sharp-tailed Sparrow (Fort McMurray). This brings the six-year list to 262 species, still about 100 species short of the total provincial list which leaves plenty of room for more to be found in coming years.

Several changes in species totals were apparent from 1980. Sizeable increases occurred among grebes, particularly Eared and Western, also Canada Goose, a few ducks including Mallard, Gadwall, Shoveller, Redhead, Lesser Scaup, Bufflehead, Ruddy Duck and Common Merganser, Swainson's and Red-tailed Hawks, Northern Harrier (Marsh Hawk), Gray Partridge, Coot, Killdeer, Black-bellied Plover, Avocet, Rock Dove, Short-eared Owl, Alder Flycatcher, Western Wood Pewee, Black-billed Magpie, Red-breasted Nuthatch Mountain Bluebird, Red-eyed Vireo, Mourning and Canada Warblers, Western Meadowlark, Pine Siskin, and American Goldfinch. Less spectacular but notable increases are apparent among the totals of Great Blue Heron, Common Goldeneye, Ring-necked Pheasant, Willet, Wilson's Phalarope, Black Tern, Mourning Dove, Burrowing Owl, Common Flicker, Eastern Phoebe, Least Flycatcher, Olive-sided Flycatcher, Blue Jay, Common Raven, Boreal Chickadee, House Wren, Catbird, Brown Thrasher, American Robin, Hermit Thrush, Golden-crowned Kinglet, Ovenbird, House Sparrow, Yellow-headed and Red-winged Blackbirds, Western Tanager and Lincoln's Sparrow.

Moderate, but often somewhat worrisome decreases are visible among such species as Common Loon, Black-crowned Night Heron, American Bittern, Pintail, Canvasback, Spotted Sandpipier, both dowitchers, Ring-billed Gull, Common Tern, Belted Kingfisher, Barn Swallow, Swainson's Thrush, Northern Waterthrush, Brewer's Blackbird, Rose-breasted Grosbeak, Savannah Sparrow, White-crowned and White-throated Sparrows and Chestnut-collared Longspurs. More serious declines occurred among Green-winged Teal, Barrow's Goldeneye, Sora, Northern Phalarope, California and Bonaparte's Gulls, Common Nighthawk, Tree, Bank and Rough-winged Swallows, Long-billed Marsh Wren, Tennessee and Yellow-rumped Warblers, American Redstart and Chipping Sparrow. Ten species were missing from the list of those seen in 1980: Whimbrel, Semipalmated, Least and Pectoral Sandpipers, Saw Whet Owl, Violet-green Swallow, Varied Thrush, Townsend's, Black-throated Green and Bay-breasted Warblers.

Calgary led the way among areas in the number of species found with 168, 34 more than second-place Edmonton. Lethbridge was third with 117 species followed by Fort McMurray with 105, Stettler with 93, Red Deer with 83, and Grande Prairie with 72 species. The species total at Lethbridge increased by 65 per cent (46 species) to show the best improvement, followed by Calgary by 9 per cent (14 species), Fort McMurray by 6 per cent (6 species), Red Deer by 4 per cent (4 species) and Stettler by 2 per cent (2 species). Only Edmonton decreased in species, down 14 per cent (21 species). Grande Prairie did not report in 1980.

DISCUSSION

The warm dry fall, winter and early spring (1980-81) had a few noticeable influences on the birds listed in the 1981 May Day Count. Many water birds were up

TABLE 1. Bird Species Observed, May Day Count 1981

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Common Loon	2	3		wk	wk	7	1	12	-
Red-necked Grebe		32	3	14	21	1	27	98	
Horned Grebe	28	96	58	3	11	25	5	226	+
Eared Grebe	155	450	5	12	281	156	325	1384	++
Western Grebe	6	44		2	5		21	78	++
Pied-billed Grebe	8	6	1	2	5	6	5	33	+
White Pelican	12	3			wk			15	+
Double-cr. Cormorant	42	31			wk			73	
Great Blue Heron	23	14			5	wk		42	+
Great Egret				(wk)					
Blk.-cr. Night Heron	2	10			wk			12	-
American Bittern	2	1	wk		1			4	-
Whistling Swan		3						3	*
Trumpeter Swan							8	8	
Canada Goose	308	609	109	30	385	136	105	1682	++
Goose sp.					1			1	
Mallard	266	744	263	66	464	98	148	2049	++
Gadwall	82	353	43	6	86	35	33	638	++
Pintail	180	196	36		13	12	28	465	-
Am. Grn-winged Teal	6	10	13		26	17	5	77	--
Blue-winged Teal	357	612	275	27	250	67	51	1639	
Cinnamon Teal	7	12		1	3	2	2	27	
American Wigeon	38	96	33	4	58	94	101	424	
Northern Shoveler	259	452	70	15	228	130	106	1162	++
Redhead	74	177	18	11	134	36	156	606	++
Ring-necked Duck	2	92		20	27	64	29	234	
Canvasback	48	180	41	5	19		31	324	-
Greater Scaup		4						4	*
Lesser Scaup	202	651	144	57	132	63	1690	2939	++
Common Goldeneye		7	11	8	42	54	20	142	+
Barrow's Goldeneye		6						6	--
Goldeneye sp.		8						8	
Bufflehead	2	197	18	4	15	43	84	363	++
Harlequin Duck		1						1	
White-winged Scoter		38			wk	wk	181	219	++

TABLE 1. (continued)

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Ruddy Duck	53	589	23	21	88	72	35	881	++
Red-br. Merganser		1						1	*
Common Merganser	6	44			1	1		52	++
Turkey Vulture			1					1	
Goshawk		1				2		3	
Sharp-shinned Hawk				1	2	1		4	
Cooper's Hawk						1		1	
Accipiter sp.					1			1	
Red-tailed Hawk	23	76	24	9	21		2	155	++
Broad-winged Hawk		1			3	1		5	
Swainson's Hawk	49	101	14	2	5			191	++
Rough-legged Hawk		5	1			wk		6	
Ferruginous Hawk	1	1						2	
Buteo sp.					1			1	
Marsh Hawk	51	39	3		6	1	4	104	++
Osprey		2		wk				2	
Prairie Falcon	8	1						9	
Peregrine Falcon					1			1	
Merlin		2			4			6	
American Kestrel	20	14		3	9	29		75	
Blue Grouse		4						4	*
Spruce Grouse			1					1	*
Ruffed Grouse		4	22		5		4	35	
Sharp-tailed Grouse		1	1		wk	wk		2	
Ring-necked Pheasant	38	6	6		10			60	+
Gray Partridge	67	31	2		1		2	103	++
Sandhill Crane						1		1	
Sora		14	1	1	13	18	3	50	--
American Coot	551	457	130	192	375	545	905	3155	++
Semipalmated Plover		1						1	
Killdeer	121	85	30	3	39	50	13	341	++
Amer. Golden Plover			2					2	
Blk.-bellied Plover	50	236			wk	1		287	++
Common Snipe	10	26	2	2	23	20	3	86	
Long-billed Curlew	32		1					33	

TABLE 1. (continued)

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Whimbrel									x
Upland Sandpiper		1		5	3			9	
Spotted Sandpiper	27	36	4		26	30		123	-
Solitary Sandpiper		1			1	1		3	
Greater Yellowlegs				2	3	4		9	
Lesser Yellowlegs	4	4	26		1	38		73	
Yellowlegs sp.					2			2	
Willet	39	58			5			102	+
Sanderling		18				4		22	
Semipalmated Sandp.			wk		wk				x
Least Sandpiper									x
"Peep" sp.	82		1					83	
Baird's Sandpiper		4				wk		4	
Pectoral Sandpiper					wk	wk			x
[Short-billed Dowit.]	(1)		(1)		wk			(2)	-
Long-billed Dowit.						wk	1	1	-
Dowitcher sp.					1			1	
Marbled Godwit	72	84	14		2			172	•
American Avocet	161	317	20	3	3			504	++
Blk.-necked Stilt	2							2	*
Wilson's Phalarope	181	246	22		35	49		533	+
Northern Phalarope		14				6		20	--
Glaucous Gull						wk			
Herring Gull		3				992	4	999	
California Gull	71	840	wk		37	904	25	1877	--
[Glaucous-winged Gull]							(2)	(2)	
Ring-billed Gull	765	324	408		38	36	7	1578	-
Wht.-headed Gull sp.	480				14			494	
Mew Gull							4	4	*
Franklin's Gull	371	96[1]	132	18	379	wk	817	1813	
Bonaparte's Gull	1				1	17	1	20	--
Forster's Tern		2			wk			2	
Common Tern	10	40	62	1	1	wk		114	-
Tern sp.			6		1			7	
Black Tern	135	126	158	58	274	27	163	941	+

[1]·hundreds more at Frank Lake.

TABLE 1. (continued)

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Band-tailed Pigeon	wk								
Rock Dove	139	71	42	20	64		4	340	++
Mourning Dove	70	21	5	6	3			105	+
Grt. Horned Owl	8	1	8	4		wk	2	23	
Burrowing Owl	7	4						11	+
Great Gray Owl				wk			1	1	*
Short-eared Owl	10	7		1	2			20	++
Saw Whet Owl					wk				x
Common Nighthawk	3				1	3		7	--
Ruby-thr. Hummingbird		1	1		2			4	
Rufous Hummingbird		1	wk					1	
Calliope Hummingbird		2						2	
Hummingbird sp.				1				1	
Belted Kingfisher	9	1			1	1		12	-
Common Flicker	44	22	3	2	11	18	6	106	+
Pileated Woodpecker		1	1	2	2			6	
Yellow-bell. Sapsucker		2	2	2	1	1		8	
Hairy Woodpecker		3	4	3	4	wk		14	
Downy Woodpecker	4		4	2	4			14	
Eastern Kingbird	122	79	28	7	21	1	2	260	
Western Kingbird	61	6			wk			67	
Eastern Phoebe		3	1		7	3		14	+
Say's Phoebe		3						3	
Alder Flycatcher		13			14	12		39	++
Least Flycatcher	14	94	3	17	135	33	1	97	+
Dusky Flycatcher		8						8	
Empidonax Flyc. sp.	2							2	
Western Wood Pewee	24	23			29	8	2	86	++
Olive-sided Flyc.	1	2		1	6	1	1	12	+
Horned Lark	149	31	4		1	wk		185	
Violet-grn. Swallow									x
Tree Swallow	50	122	196	39	106	107	4	624	--
Bank Swallow	96	152	39	2	12	104		405	--
Rough-winged Swallow	72	28	1	2	2			105	--
Barn Swallow	186	88	149	12	46	57	10	548	-
Cliff Swallow	575	380	302	47	1	1132		2437	

TABLE 1. (continued)

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Purple Martin			20		9			29	
Gray Jay	wk	8			4	9		21	
Blue Jay	3			7	27	7	2	46	+
Blk.-billed Magpie	244	215	56	28	125	2	19	689	++
Common Raven	11	16		2		147		176	+
Common Crow	151	166	174	30	56	14	19	610	
Clark's Nutcracker	wk								
Blk.-capped Chickadee	4	24	13	11	40	4		96	
Mountain Chickadee		2						2	
Boreal Chickadee		7		1	8	1		17	+
Wht.-br. Nuthatch	1		1	4				6	
Red-br. Nuthatch	4	24	3	6	11			48	++
Nuthatch sp.					1			1	
American Dipper		2						2	
House Wren	54	34	23	5	28		2	146	+
Long-b. Marsh Wren		5	wk		13	wk		18	--
Rock Wren	1	2						3	
Nor. Mockingbird									x
Gray Catbird	10	5	4	1	7			27	+
Brown Thrasher	11	5						16	+
American Robin	304	112	107	70	71	52	5	721	+
Varied Thrush									x
Hermit Thrush		1			1	18		20	+
Swainson's Thrush	22	6			5	5		38	-
Gray-chk. Thrush	1							1	
Veery	4	1	1		1			7	
Mountain Bluebird	16	35	95	wk	2			148	++
Townsend's Solitaire		8						8	
Golden-cr. Kinglet		9			3			12	+
Ruby-cr. Kinglet	4	35		1	14	16		70	
Sprague's Pipit	wk	6	3					9	
Cedar Waxwing	15	8			wk			23	
Loggerhead Shrike	2	2						4	
Common Starling	366	201	174	42	134	20	28	965	
Solitary Vireo					3			3	
Red-eyed Vireo	1	1	1	8	48	58	1	118	++

TABLE 1. (continued)

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Philadelphia Vireo		1			1	1		3	
Warbling Vireo	2	20	1	3	19		2	47	
Blk.-and-Wht. Warbler				1	1	1		3	
Tennessee Warbler		24			17	95		136	--
Orange-cr. Warbler		3			1	wk		4	
Nashville Warbler		1						1	
Yellow Warbler	59	94	14	26	76	50	15	344	+
Magnolia Warbler	wk					wk			
Cape May Warbler					1			1	*
Yellow-rumped Warbler	3	36			8	13		60	--
Townsend's Warbler									x
Blk.-thr. Green Warbler									x
Bay-br. Warbler						wk			x
Blackpoll Warbler	3	2						5	
Palm Warbler						2		2	*
Ovenbird		1			21	30		52	+
Nor. Waterthrush		2				15		17	-
Connecticut Warbler					5			5	
Mourning Warbler					17	13		30	++
MacGillivray's Warbler	wk	1						1	
Common Yellowthroat	12	17	1		31	12		73	
Wilson's Warbler		4				9		13	
Canada Warbler						18		18	++
American Redstart		1			5	wk		6	--
House Sparrow	374	122	197	12	99	39	2	845	+
Bobolink	1							1	
Western Meadowlark	259	146	21	2	wk			428	++
Yellow-headed Blkbird	751	643	20	11	142	17	26	1610	+
Red-winged Blkbird	540	591	241	55	564	345	97	2334	+
Northern Oriole	50	53	26	33	73	1	5	241	
Rusty Blackbird						7		7	
Brewer's Blackbird	170	142	102		21	44	7	486	-
Common Grackle	17	8			11	63	5	104	
Brn.-headed Cowbird	51	103	36	1	39	26	39	295	
Blackbird sp.		13	5	27	6			51	
Western Tanager		1			1	12		14	+

TABLE 1. (continued)

	Leth	Calg	Stet	Red Deer	Edm	Ft McMry	Gran Pr	Totals	Notes
Rose-br. Grosbeak	wk			3	18	7	1	29	-
Evening Grosbeak		1						1	
Purple Finch				11	4	1		16	
Pine Siskin	wk	164			25	wk		189	++
Amer. Goldfinch	54	39	51	14	15			173	++
Wht.-winged Crossbill					1			1	*
Rufous-sided Towhee	10	3						13	
Savannah Sparrow	97	75	16		24	33	42	287	-
Grasshopper Sparrow	(2)							(2)	
Baird's Sparrow		6						6	
LeConte's Sparrow		10	2	11	26	3		52	
Sharp-tailed Sparrow						2		2	*
Vesper Sparrow	91	66	13		1		2	173	
Lark Sparrow	4							4	
Dark-eyed Junco		21			9	7		37	
Tree Sparrow				5				5	
Chipping Sparrow	14	52	4	4	45	98		217	--
Clay-col. Sparrow	44	159	22	7	50	35		317	
White-cr. Sparrow	wk	9	2	1				12	-
White-thr. Sparrow	wk	10		8	50	69	3	140	-
Lincoln's Sparrow		12			17	26	55	110	+
Swamp Sparrow					5	19		24	
Song Sparrow	9	16	4	4	34	63	6	136	
Sparrow sp.			12					12	
Chestnut-col. Longspur	2	6						8	
TOTAL SPECIES	117	168	93	83	134	105	72	207	

( ) = lack of details submitted with record
\+ = moderate increase over 1980
++ = large increase over 1980
\- = moderate decrease over 1980
-- = large decrease over 1980
x = reported in 1980 but not in 1981
* = reported in 1981 but not in 1980

in numbers, while others such as Pintails, Green-winged Teal and Canvasbacks were down. It is possible that the early season low water levels brought many of these water birds up from southern parts of the Great Plains, while Pintails and the teal, which are early arrivals, tended to fly further north before most of the moisture arrived. A few water birds merit monitoring, including the Black-crowned Night Heron, American Bittern and Canvasback which are among species subject to "blue-listing" on a North American scale. Increases in Red-tailed and Swainson's Hawks were perhaps a result of 1980 being rainy in southern Alberta. The marked increase in numbers of Marsh Hawks in southern Alberta was pleasing after a year of relative scarcity. The notable decrease in Soras fits the low water levels previously mentioned. The coot totals were high throughout the count areas but especially in Grande Prairie which reported a large concentration, perhaps because of the lack of moisture south of the border. Probably the same reason accounts for the high Avocet numbers as well as the new addition of Black-necked Stilt to the May Day Count list. The dearth of shorebird observations probably results from three factors: low water levels, the advanced season and the fact that Beaverhill Lake had no coverage. Gulls were down chiefly because Calgary did not repeat the colony surveys done in 1980. Increases in the grassland owls (Burrowing and Short-eared) were quite encouraging following a drop in numbers in 1980. Flickers rebounded similarly as did many flycatchers, possibly the result of high activity levels of birds and counters in the warm 1981 weather compared with the steady rain seen in 1980. Nearly all swallows had low counts this past year, possibly from being more dispersed and less easily counted than they would have been in the rainy cooler weather of previous years. Greater activity levels in warm weather may have influenced increases among some corvids as well as Boreal Chickadee, Red-breasted Nuthatch, House Wren, Catbird, thrasher, robin, Hermit Thrush, Golden-crowned Kinglet and Red-eyed Vireo. The lower warbler totals and losses of three species this year reflects the effects of unusually high 1980 numbers which was the result of rain delaying the migration of flocks throughout cities and woodlots in central Alberta. This may also have been the case with Rose-breasted Grosbeaks. Nevertheless, good efforts by Edmonton and Fort McMurray this year resulted in a few increases in warbler species such as Ovenbird, Yellow, Mourning and Canada Warblers. Numbers of meadowlark, Yellow-headed and Red-winged Blackbirds increased probably due to higher count turnouts in southern Alberta. Brewer's Blackbirds declined, especially in central and northern Alberta (Red Deer, Edmonton and Ft. McMurray) where lower observer numbers were fielded. Pine Siskins and goldfinches showed substantial increases perhaps reflecting a positive population fluctuation, or the more advanced 1981 spring season. Decreases in the numbers of four sparrows (Savannah, Chipping, White-throated and White-crowned) are not easily attributable to consistent patterns. Chipping Sparrow totals reflected the loss of the Banff and Yamnuska counts, while Savannah Sparrow differences could be laid on totals at Edmonton and Calgary. White-crowned and White-throated Sparrows differences are consistent with the pattern expected in a more advanced migration season. No apparent reason exists for the lower Chestnut-collared Longspur totals in 1981; could the wet month of May 1980 have been catastrophic to the population?

The effects of the losses of the Banff and Yamnuska counts were felt among several other declines in species totals or losses over 1980 results. These include Ring-necked Duck, Barrow's Goldeneye, Sora, Violet-green Swallow, Varied Thrush, and Tennessee, Yellow-rumped and Townsend's Warblers.

MAMMALS

TABLE 2. Totals reported for mammals species in four major count areas.

	Lethbridge	Calgary	Edmonton	Grande Prairie
White-tailed Jackrabbit	30	3		
Snowshoe Hare			1	
Groundhog				2
Least Chipmunk			2	
Chipmunk sp.		1		
Richardson's Ground Squirrel	85	61	12	
Columbian Ground Squirrel		20		
Red Squirrel		1	14	
Beaver			2	
Muskrat	1		3	4
Black Bear		1		
Coyote			1	2
Badger			1	
Short-tailed Weasel			1	
Meadow Vole			1	
Mule Deer		15	1	
Bighorn Sheep		3		
Moose		1		

LOCAL COUNT DATA

LETHBRIDGE.

30 and 31 May; times not available (N/A). Observers: day 1, 28; day 2, 16, 44 total individuals. Observer hours: day 1, 132; day 2, 85. Team hours: day 1, 53; day 2, 36 Weather: precipitation nil, cloud 0.2 to 0.3, 0.3 to 1.0, wind S to SW 6-7 kmh, W to SW 24-56 kmh; temperature 18°C to 26°C, 16°C to 19°C. Team mileage: by car, 291 mi. (469 km), 307 mi. (494 km); on foot 31 mi. (50 km), 20 mi. (32 km), horse & wagon 4 mi. (6 km). Areas: Lethbridge, Claresholm, Granum, Cardston, Lethbridge Nature Reserve, Country Club, 6-mile Coulee, Fort Whoop-up, Luco and Blair farms, Park Lake, Chin Lakes, Ridge Reservoir, Coaldale area prairie, Animal Disease Research Station, Henderson Lake, West side Oldman River, Picture Butte Lake, Stirling Lake. Observers: S. Arner, D. & M. Axtell, B. & D. Blair, F. Brown, D. & T. Dolman, E. Dougan, C. Goodall, B. Haig, B.& L. Hall, L. Holsteyn, A. & F. Harper, H. Hudson, B. Kinscott, B. & G. Luco, L. McKillop, B. & G. Merrick,

D. & G. Nash, G. Nelson, G. Norgard, M. O'Shea (compiler), S. Pethbridge, P. Pratto, D. Rhodes, A. Roberts, G. & H. Ross, K. & S. Shaw, M. Sinik, T. Stronski, M. Thomson, J, J. & P. Wilkinson.

CALGARY

30 and 31 May; 0600-2115 hours, 0640-1650 hours. Observers: 19 (+Class 16); 13 (+ Class 6, 10) = Total 26 (+32 students). Observer Hours: 123.5, 212 hrs. Team hours: 43, 39. Weather: precipitation, trace, 23 cm; cloud 0 to 0.8; wind S variable 11 km/hr; N 25 km/h to 37 km/h; temperature 5° to 24°C, 6° to 7°C. Team mileage: by car 296 (477 km), 448 (721 km), by foot 16.5 (27 km), 18 (29 km). Areas: Brown-Lowery Natural Area, Nose Hill, Edworthy Park, Montgomery Flats, Inglewood Bird Sanctuary, Bearspaw Dam, Glenmore Reservoir, Bow Valley Provincial Park, Yamnuska (superficially), Grande Valley, Sheep River, Irricana area, Frank Lake, Eagle and Namaka Lakes, Carsland. Observers: S. Alexander, M. Babey, R. Barclay, B. Burrows, D. Dickson (and class of 6), O. Droppo (and class of 16), A. & M. Fisher, J. Goldsmith, E. Kethler, M. Lore, M. McNicholl, C. Osborne, J. Podlubny, J. Riddell (and class of 10), K. Rickke, M. Scott-Brown, P. Sherrington, J. & M. Steeves, D. Stiles, B. Storms, D. Warbanski, J. Williams, Bill Wilson, A. Wiseley (compiler).

STETTLER-BUFFALO LAKE

30 and 31 May; 1030-1630 hours, 1000-1600 hours. Observers: total both days 31. Observer hours: 38, 44. Team hours: N/A. Weather: Precipitation nil, 0.3 cm rain; cloud cover, 0.2 to 0.4, 0.8 to 1.0; wind SE 10 to 15 km/h, NE 0 to 5 km/h, temperature, 10-23°C, 5-12°C. Team mileage: by car 36 mi. (58 km), 140 mi. (225 km); on foot: N/A. Areas: Stettler, Boss Hill, Buffalo Lake, Rochon Sands Provincial Park, Mckenzie Crossing, Ewing Lake district, C.D. Bird farm. Observers: L. Bickle, A. & J. Burrell, E. & G. Clark, A. & B. Clark, Dr. & T. Grafe, M. Graham, B. & L. Greenlee, V. Hainsworth, V. Hansen, H. Hayes, A. & E. Haywood, G. & W. Hewlett, E. Kirtley, L. Lohr, V. Maitland (compiler), B. Marshall, E. Moman, G. & G. Neill, B. Smith, L. Stewart, K. & K. Strandquist, Rochon Sands Park Ranger and Assistant.

RED DEER

30 May; 0800-1600 hours. Observers: 13. Observer hours: 63. Team hours: 22. Weather: precipitation nil; cloud 0.6 to 0.9; wind 15-30 km, dir?; temp. 8-13°C. Team mileage: by car 51 mi. (82 km), on foot 16.5 mi. (27 km). Areas: Red Deer and surroundings, Jarvis Bay Provincial Park (Sylvan Lake), Peck and Larson farms. Observers: L. Gathercole, E. & M. Glabois, M. Goldstrom, K. Larson, B. Nesbitt, M. O'Riordan (compiler), E. Peck, N. & W. Savage, F. Schutz, J. Syborn.

EDMONTON

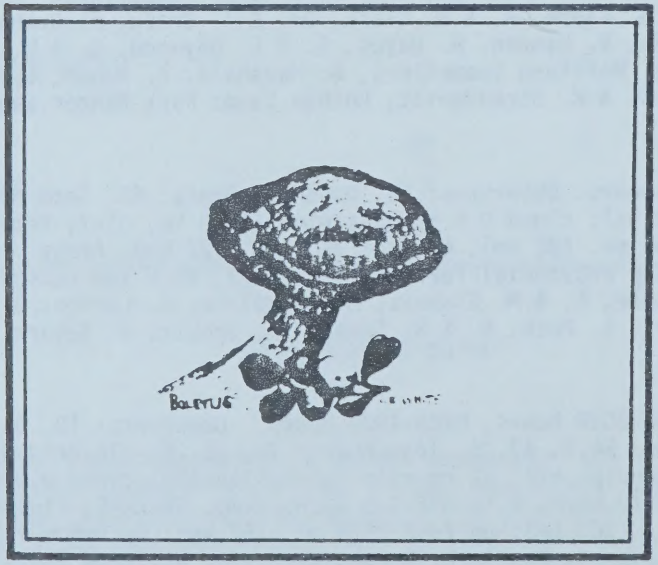
30 and 31 May; 0530-2030 hours, 0700-1900 hours. Observers: 10, 8, total both days 11. Observer hours: 54.5, 47.25. Team hours: 30, 26.25 - 16 driven, 44 walked, 2 canoeing. Weather: precip. nil, 12 cm rain intermittantly; cloud 0.0 to 1.0, 1.0 to 1.0; wind E to SE 4-12 km/h, E to NNE 5-8 km/h; temp. 10-24°C, 11-16°C. Team mileage: by car 188 mi. (303 km); on foot 32.5 mi. (52 km); by canoe 1.5 mi. (2 km). Areas: Edmonton, St. Albert, Westlock, Devon, Glenevis, Whitemud and Kinnaird Ravines, Skunk Hollow, Queen Elizabeth, Kinsmen, Emily Murphy and Mayfair Parks, Clifford E. Lee Sanctuary, Bittern, Majeau, Oldman and Egg Lakes, Devonian Botanical Gardens. Observers: P. Assman (compiler), D. Cuthiell, P. DeMulder, C. Harper, L. & W. Hochachka, S. l'Hirondelle, J. Lange, E. McCoy, T. Thormin, J. Wesley.

FORT MCMURRAY

30 and 31 May; 0400-1200 hrs., 0400-1400 hrs. Observers: 2, 2; total individuals 3. Observer hours: 16, 17 hours. Team hours: 8, 8.5; 15 hours driven, 1.5 walked. Weather: precip. nil; cloud 0.0, 0.1, wind ESE 0-12 km/h, ENE 0-12 km/h; temp. 9-18°C, 12-24°C. Team mileage: 247 mi. (395 km) driven, 2.5 mi. (4 km) walked. Areas: Fort McMurray, Syncrude and Suncor leases, Gregoire Lake Park. Observers: S. Gulley, J. Gulley (compiler), Brian Wylie.

GRANDE PRAIRIE

30 and 31 May; 1400-1530 hrs, 1700-2100 hrs. Observers: 3, 2, total 4 individuals. Observer hours: 4.5, 8. Team hours: 1.5, 4. Weather: precip. 4 cm rain (steadily), 18 cm rain (am); cloud 1.0, 1.0; wind E to NW 10-28 km/h, N to WSW 9-22 km/h; temp. 12-20°C, 10.4-14.7°C. Team mileage: N/A. Areas: Grande Prairie, Lake Saskatoon, Uswells, Bear and Hermit Lake. Observers: E. Craig (compiler), G. Craig, L. Dahl, J. LaValley.



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ALBERTA FLOWERING DATES - 31 October 1982

Return to: Dr. Charles D. Bird

Box 165, Mirror, Alberta T0B 3C0

ALBERTA CHRISTMAS BIRD COUNTS - 15 January 1983

Mail to: Virginia Young

R. R. #1, Busby, Alberta T0G 0H0

MAY DAY COUNT - BIRDS AND MAMMALS - 15 July 1982

Mail to: Allen N. Wiseley

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MAY DAY COUNT - PLANTS - 15 July 1982

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Northern Forest Research Centre

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PRAIRIE NEST RECORDS SCHEME - 1 October 1982

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FLOWERING DATE OBSERVATIONS

Use this form for recording observations from one particular location such as a farm, acreage or other frequently-visited site. Flowering is interpreted as meaning that sepals and/or petals are open. The compiler will be happy to answer questions or identify pressed specimens or photos. Deadline for submission of data is the end of October. Include your name and address.

LOCATION:

SPECIES	FIRST DATE IN FLOWER	LATER DATES	LAST DATE IN FLOWER
PRAIRIE CROCUS			
ASPEN			
EARLY BLUE VIOLET			
GOLDEN BEAN			
SASKATOON			
STAR-FLOWERED SOLOMON'S SEAL			
CHOKE CHERRY			
YELLOW PEA VINE			
NORTHERN BEDSTRAW			
COMMON YARROW			
WESTERN WOOD LILY			
BROWN-EYED SUSAN			

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CHOKE CHERRY			
YELLOW PEA VINE			
NORTHERN BEDSTRAW			
COMMON YARROW			
WESTERN WOOD LILY			
BROWN-EYED SUSAN			

RETURN TO: Dr. C.D. Bird
FAN Phenology Project Coordinator
P.O. Box 165, Mirror, AB T0B 3C0
Deadline: October 31

FLOWERING DATE OBSERVATIONS

Use this form for recording observations from more than one location or during the course of several field trips to various locations.

Species	Date	Location	Date	Location	Date	Location
Prairie Crocus						
Aspen						
Early Blue Violet						
Golden Bean						
Saskatoon						
Star-flowered Solomon's Seal						
Choke Cherry						
Yellow Pea Vine						
Northern Bedstraw						
Common Yarrow						
Western Wood Lily						
Brown-eyed Susan						

RETURN TO: Dr. C.D. Bird
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P.O. Box 165
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(Deadline, October 31)

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Brown-eyed Susan						

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